

The Politics of AIDS: Compulsory State Powers, Public Health, and Civil Liberties

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I. INTRODUCTION

The politics of AIDS is moving steadily in the direction of the use of compulsory powers of the state. Some politicians have demanded isolation and criminal confinement of "recalcitrant" AIDS carriers.¹ An ever increasing number of state

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1. Some politicians and commentators have called for isolation of persons with HIV who persist in spreading the infection. See Grutsch & Robertson, *The Coming of AIDS: It Didn't Start with the Homosexuals and It Won't End with Them*, 19 AM. SPECTATOR 12 (1986); *Florida Considering Locking Up Some Carriers of the AIDS Virus*, N.Y. Times, Jan. 27, 1988, at A15, col. 1 (state officials proposing "special lock-up wards" for AIDS virus carriers); Boodman, *Idaho's Drive to Stop AIDS at the Border Arouses Doubts*, Wash. Post, Nov. 10, 1987, at 4, col. 1; Lewin, *Rights of Citizens*

legislatures have considered or enacted statutes authorizing the exercise of compulsory public health powers.²

Political advocacy for a "tougher" approach to the AIDS epidemic needs to be understood. The widespread publicity given to the potential for continued spread of the epidemic³ has charged political debate. In an atmosphere of public health crisis, and with little early prospect of an effective scientific intervention,⁴ there grows an impatience with voluntary measures focused on education and counseling.

The fact that the epidemic is growing relentlessly is not the only thing that fuels calls for coercive state action. It is also that the human immunodeficiency virus (HIV) is spread predominantly through volitional behavior⁵ such as sodomy, prostitution,

and Society Raise Legal Muddle on AIDS, N.Y. Times, Oct. 14, 1987, at A1, col.1 (Sen. Jesse Helms and Pat Robertson suggesting "quarantine may become necessary"). Support for criminal law sanctions has been even more vocal. See SIXTEENTH CONFERENCE OF EUROPEAN MINISTERS OF JUSTICE, RESOLUTION No. 1 (Lisbon June 22, 1988) (recommending use of criminal law to combat AIDS as a last resort); Sullivan & Field, *AIDS and the Coercive Power of the State*, 23 HARV. C.R.-C.L. L. REV. 139 (1988); Squires, *Spreading AIDS on Purpose*, Wash. Post, Apr. 19, 1988 (Health), at 6; Boorstin, *Criminal and Civil Litigation on Spread of AIDS Appears*, N.Y. Times, June 19, 1987, at 1, col. 3.

2. See *infra* notes 71, 72, 125-27, & 148 and accompanying text.

3. On December 18, 1987, the U.S. Centers for Disease Control (CDC) published a full report of the Domestic Policy Council containing an extensive review of published and unpublished data on the prevalence and incidence of HIV infection. *Human Immunodeficiency Virus Infection in the United States: A Review of Current Knowledge*, 36 MORBIDITY & MORTALITY WEEKLY REP., (Supp. 6) 1 (1987) [hereinafter *Review of Current Knowledge*]. By June 6, 1988, a total of 64,506 cases of AIDS had been reported in the United States; over 14,000 of these had been reported since Jan. 1, 1988, and 36,255 cases had resulted in death. In the previous twelve months, 23,200 cases were reported, representing an increase of 58% over the year before. CDC, WEEKLY SURVEILLANCE REP. June 6, 1988; *Quarterly Report to the Domestic Policy Council on the Prevalence and Rate of Spread of HIV and AIDS in the United States*, 259 J. A.M.A. 2657 (1988). By the end of 1991 it is projected that there will be more than 270,000 cases, with more than 74,000 of those occurring in 1991 alone. *Confronting AIDS: Directions for Pub. Health, Health Care and Research*, 1986. INST. OF MED., NAT'L ACAD. OF SCIENCES, 8-9, 85-89. *Confronting AIDS: Update 1988*, 1988 INST. OF MED. NAT'L ACAD. OF SCIENCES 51-52 [hereinafter *UPDATE 1988*]. These are all cases of AIDS as defined by the *Revision of the CDC Surveillance Case Definition for Acquired Immunodeficiency Syndrome*, 36 MORBIDITY & MORTALITY REP. 35 (1987); *Human Immunodeficiency Virus (HIV) Infection Codes Official Authorized Addendum ICD-9-CM (Revision No.1)*, 36 MORBIDITY & MORTALITY WEEKLY REP. (Supp. 7) 1S (1987). Cases of CDC-defined AIDS are only the surface of the epidemic. There is a second epidemic of persons who harbor the virus and who show few or no symptoms. The number of persons infected with HIV in the United States is estimated to be between 945,000 and 1.4 million people. *UPDATE 1988*, at 49-50. See Harris, *The AIDS Epidemic: Looking into the 1990s*, 90 TECHNOL. REV. No. 5, at 58 (July 1987). These two pandemic epidemics are connected by a timeline of time—the time between infection and subsequent disease. See generally Mueller, *The Epidemiology of the Human Immunodeficiency Virus Infection*, 14 LAW, MED. & HEALTH CARE 250 (1986). This time link between infection and disease can be measured in months or many years. It is now thought that the overwhelming majority of infected individuals will develop serious symptomatology. *UPDATE 1988*, at 35-36; Foreman, *Virus 'Inexorably' Leads to AIDS, U.S. Study Says*, Boston Globe, June 2, 1988, at 1, col. 1.

4. Development of a preventative vaccine for HIV is fraught with difficulty. Frances & Petricciani, *The Prospects for and Pathways Toward a Vaccine for AIDS*, 313 NEW ENG. J. MED. 1586 (1985); Gostin, *Vaccination for AIDS: Legal and Ethical Challenges from the Test Tube, to the Human Subject, Through to the Marketplace*, 2 AIDS AND PUB. POL'Y J. 9 (1987); Mariner & Gallo, *Getting to Market: The Scientific and Legal Climate for Developing an AIDS Vaccine*, 15 LAW, MED. & HEALTH CARE 17 (1987). Prospects for treatment appear more likely. See Yarchoan & Broder, *Development of an Antiretroviral Therapy for the Acquired Immunodeficiency Syndrome and Related Disorders: Progress Report*, 316 NEW ENG. J. MED. 557 (1987). Yet, the only approved treatment, azidothymidine (AZT) is not intended to be curative and can be highly toxic. Its purpose is to help prevent the occurrence of opportunistic infections in patients who are immunocompromised. See *A Ray of Hope in the Fight Against AIDS*, TIME, Sept. 29, 1986, at 60.

5. Of the cumulative total of AIDS cases reported to the CDC, 63% were homosexual and bisexual men and 19% were heterosexual men and women with a history of intravenous drug use. Approximately 4% of cases were attributed to heterosexual transmission. CDC, WEEKLY SURVEILLANCE REP., June 6, 1988. See also, Curran, Morgan, Hardy, Jaffe, Darrow & Dowdle, *The Epidemiology of AIDS: Current Status and Future Prospects*, 229 SCIENCE 1352 (1985) [hereinafter *Curran & Morgan*]; Gostin, *Acquired Immune Deficiency Syndrome: A Review of Science, Health Policy, and Law*, in AIDS AND PATIENT MANAGEMENT: LEGAL, ETHICAL AND SOCIAL ISSUES (M. Witt, ed. 1986). The pattern of "high risk groups" is considerably different in other parts of the world. See PANOS INSTITUTE, AIDS AND THE THIRD WORLD (1988); Goldsmith, *AIDS Around the World: Analyzing Complex Patterns*, 259 J. A.M.A. 1917 (1988) (predominance

and the use of intravenous drugs, which are widely regarded as immoral, even criminal. Because the virus is primarily transmitted by intentional behavior that is within the control of the carrier, it is seen as susceptible to a legal, rather than a public health, solution.

The use of compulsory public health powers can be a visible political symbol of seriousness of purpose in controlling AIDS. Public opinion polls consistently show some support for coercive action, with a significant proportion of respondents favoring "quarantine" of people with AIDS "in special places to keep them away from the general public."⁶ A majority of respondents also favor governmental restrictions on the sexual activities of known AIDS carriers.⁷

Public health authorities have resisted political and public pressure for the use of coercive powers.⁸ Instead, they have relied upon education and counseling of high risk groups to encourage behavioral changes. Experience with hepatitis B has demonstrated that voluntary compliance can reduce the spread of a virus with an analogous pattern of transmission,⁹ and emerging evidence on AIDS shows significant alterations of high risk behavior.¹⁰ Furthermore, experience with the use of coercive measures in venereal disease control shows that they can be ineffective, discriminatory, and invidious.¹¹ Absent evidence that personal control measures change behavior more effectively than voluntary education and counseling, government cannot justify their use. The behaviors sought to be controlled or punished are highly ingrained, intimate, and deeply human activities. Coercive state action is a particularly crude tool to compel change in these behaviors.

Compulsory public powers are justified only if they meet the following criteria: there is a significant risk of transmission of the AIDS virus; the public health response is efficacious in preventing a primary mode of transmission of the virus; the

of heterosexual transmission in Africa); *Update: Acquired Immunodeficiency Syndrome (AIDS)—Worldwide*, 259 J. A.M.A. 3104 (1988).

6. In five national opinion polls conducted between Sept. 1985 and Jan. 1986, between 28% and 51% of respondents said "[p]eople with AIDS should be put into quarantine in special places to keep them away from the general public." Singer, Rogers & Corcoran, *The Polls—A Report: AIDS*, 51 PUB. OPINION Q. 580, 591-92 (1987). See *Growing Concern, Greater Precautions*, NEWSWEEK, Nov. 24, 1986, at 30, 32; *Poll Indicates Majority Favor Quarantine for AIDS Victims*, N.Y. Times, Dec. 20, 1985, at A24, col. 1.

7. Two national opinion polls conducted in Nov. 1985 and Jan. 1986 found that 58% and 51%, respectively, of the respondents believed that "governmental restrictions should be placed on the sexual activities of people who are known carriers of AIDS." Singer, Rogers & Corcoran, *supra* note 6, at 592.

8. The United States Public Health Service relies on public education and counseling to encourage behavior change and has not advocated the use of compulsion. See PHS Task Force on AIDS, *Public Health Service Plan for the Prevention and Control of Acquired Immune Deficiency Syndrome (AIDS)*, 100 PUB. HEALTH REP. 453 (1985); U.S. Dep't Health & Human Services, *Guidelines for AIDS Prevention Program Operations* (1987); *Accord*, WORLD HEALTH ORGANIZATION, GLOBAL PROGRAMME ON AIDS, GUIDING OBJECTIVES AND PRINCIPLES FOR THE COMPREHENSIVE COORDINATION OF GLOBAL AND NATIONAL AIDS ACTIVITIES, GPA/ER/88.2 (1988).

9. Blumberg & Fox, *The Daedalus Effect: Changes in Ethical Questions Relating to Hepatitis B*, 102 ANNALS INTERN. MED. 390 (1985).

10. Becker & Joseph, *AIDS and Behavioral Change to Reduce Risk: A Review*, 78 AM. J. PUB. HEALTH 394 (1988); *Self Reported Behavioral Change Among Gay and Bisexual Men—San Francisco*, 34 MORBIDITY & MORTALITY WEEKLY REP. 613 (1985); Weller, Hindley & Adler, *Gonorrhea in Homosexual Men, and Media Coverage of Acquired Immune Deficiency Syndrome in London 1982-83*, 289 BRIT. MED. J. 1041 (1984).

11. See A. BRANDT, *NO MAGIC BULLET: A SOCIAL HISTORY OF VENEREAL DISEASE IN THE UNITED STATES SINCE 1880*, at 84-97, 156-60 (1985, Rev. Ed. 1987); Brandt, *AIDS: From Social History to Social Policy*, 14 LAW, MED. & HEALTH CARE 231, 231-33 (1986); Brandt, *AIDS in Historical Perspective: Four Lessons from the History of Sexually Transmitted Diseases*, 78 AM. J. PUB. HEALTH 367, 369-70 (1988).

economic, practical, or human rights burdens are not disproportionate to the public health benefits; and the public health power is the least restrictive alternative that would prevent viral transmission.¹²

These proposed criteria are intended to demonstrate two realities in public health. First, a compulsory power needs vigorous justification and should not be imposed merely because it is dressed in the guise of public health. Thus, there must be reliable epidemiologic evidence that the virus can, and probably will, be transmitted by the person's behavior; and that the exercise of the power will prevent the transmission of the virus. Second, while the health of the community is often an overriding public value, it is not absolute. In each case the public good to be achieved must be balanced against the costs of the policy. If the invasion of human rights, the financial cost, or the practical burdens of the policy are wholly disproportionate to the benefits, it should not be adopted. There are instances where compulsory powers are necessary to prevent a clear likelihood that the virus will be transmitted. However, I will demonstrate that many compulsory powers have been, and will be, exercised in cases where they serve no overriding public purpose.

In the following section I carefully examine the levels of risk posed by behavior which can potentially transmit HIV. It is essential to understand the relative risks of such behavior as a foundation for the rest of this Article, which analyzes two major proposals for coercive state action: isolation of carriers of HIV and criminal prosecution for transmission of HIV.

This Article will demonstrate that these compulsory state powers have little place in fighting a disease epidemic.

II. A SIGNIFICANT RISK OF TRANSMISSION

A threshold question in assessing the value of a compulsory public health power is whether there is a significant risk of transmission of the AIDS virus. Public health powers have been advocated or used in cases where the person's behavior was highly unlikely to transmit the AIDS virus—biting, spitting, splattering of blood, or donating blood.

The imposition of compulsory powers in these types of cases is misplaced for two reasons. First, the compulsory powers will have little public utility if the risk posed by the person's behavior is exceedingly small. The resources placed into preventing low risk behavior are not well spent, for even if the behavior can be prevented, it is unlikely to have any effect on the spread of the epidemic. Second, focusing on low risk behaviors of AIDS carriers is iniquitous, for society already tolerates other activities that pose equal or greater risks. It is important to examine the relative risk when assessing sanctions against AIDS carriers. For example, a decision to incarcerate an AIDS carrier for biting or spitting ignores the fact that this behavior poses a much lower risk of serious harm than other behavior, such as dangerous driving, for which there is often no significant criminal liability.

12. See generally, Gostin, Curran & Clark, *The Case Against Compulsory Casefinding in Controlling AIDS—Testing, Screening and Reporting*, 12 AM. J. L. & MED. 7, 21–24 (1986).

The concept of "significant risk" is well recognized in public health law. Modern courts have consistently required a clear public health justification for any personal control measure.¹³ Yet the concept of "significant risk" has never been clarified or defined. It should be based upon epidemiologic evidence of the gravity of the harm and the probability of the harm occurring. A risk is significant only if the mode of transmission is scientifically well established, there is a reasonable likelihood that viral transmission will take place, and the potential harm is serious. Below I examine the various modes of transmission of the AIDS virus and the level of risk posed.

A. Risk of Sexual Transmission

Sexual intercourse is a primary mode of transmission of HIV.¹⁴ HIV is much less easily communicated than other sexually transmitted diseases, such as hepatitis B, syphilis and gonorrhea.¹⁵ The range of the risk of transmission of HIV in a prolonged sexual relationship is 7 to 68% that the virus will be transmitted.¹⁶ Transmission through anal-receptive intercourse is considered more efficient,¹⁷ although it is thought that individual host susceptibility¹⁸ and variations in infectivity¹⁹ among different people may be additional factors. Transmission from male-to-female is well

13. See *School Bd. of Nassau County v. Arline*, 480 U.S. 273, 288 (1987) *reh'g denied*, 107 S.Ct. 1913 (1987) (school teacher with tuberculosis could not be fired unless she posed a "significant risk" to health); *New York State Ass'n for Retarded Children v. Carey*, 612 F.2d 644 (2d Cir. 1979) (mentally retarded children who were carriers of serum hepatitis could not be excluded from regular public school classes because the health hazard was only a remote possibility); *District 27 Community School Bd. v. Board of Educ.*, 130 Misc. 2d 398, 502 N.Y.S. 2d 325 (Sup. Ct. 1986) (the automatic exclusion of school children with AIDS would effect a purpose having no adequate connection with public health).

14. See UPDATE 1988, at 38-45; Friedland & Klein, *Transmission of the Human Immunodeficiency Virus*, 317 NEW ENG. J. MED. 1125, 1128-1130 (1987); Peterman, Stoneburner, Allen, Jaffe & Curran, *Risk of Human Immunodeficiency Virus Transmission from Heterosexual Adults with Transfusion-Associated Infections*, 259 J. A.M.A. 55 (1988); *Review of Current Knowledge*, *supra* note 3, at 2-4.

15. Peterman & Curran, *Sexual Transmission of Human Immunodeficiency Virus*, 256 J. A.M.A. 2222 (1986) (Transmission rate of *Neisseria gonorrhoeae* after a single sexual exposure is 22-25% for a man and 50% for a woman).

16. See generally Allain, *Prevalence of HTLV-III/LAV Antibodies in Patients with Hemophilia and in their Sexual Partners in France*, 315 NEW ENG. J. MED. 517 (1986); Fischl, Dickinson, Scott, Klimas, Fletcher & Parks, *Evaluation of Heterosexual Partners, Children, and Household Contacts of Adults with AIDS*, 257 J. A.M.A. 640 (1987) [hereinafter Fischl & Dickinson]; Kreiss, Kitchen, Prince, Kasper & Essex, *Antibody to Human T-Lymphotropic Virus Type III in Wives of Hemophiliacs: Evidence for Heterosexual Transmission*, 102 ANNALS INTERN. MED. 623 (1985); Mann, Quinn, Francis, Nzilambi, Bosenge, Bila, McCormick, Ruti, Asila & Curran, *Prevalence of HTLV-III/LAV in Household Contacts of Patients with Confirmed AIDS and Controls in Kinshasa, Zaire*, 256 J. A.M.A. 721, (1986) [hereinafter Mann & Quinn]; Redfield, Markham, Salahuddin, Sarngadharan, Bodner, Folks, Ballou, Wright & Gallo, *Frequent Transmission of HTLV-III Among Spouses of Patients with AIDS-Related Complex and AIDS*, 253 J. A.M.A. 1571 (1985) [hereinafter Redfield & Markham].

17. Goedert, Sarngadharan, Biggar, Winn, Greene, Mann, Gallo, Sarngadharan, Weiss, Grossman, Bodner, Strong & Blattner, *Determinants of Retrovirus (HTLV-III) Antibody and Immunodeficiency Conditions in Homosexual Men*, 2 LANCET 711 (1984); Kingsley, Kaslow, Rinaldo, Jr., Detre, Odaka, Van Raden, Detels, Polk, Chmiel, Kelsey, Ostrow & Visscher, *Risk Factors for Seroconversion to Human Immunodeficiency Virus Among Male Homosexuals*, 1 LANCET 345 (1987); Winkelstein, Lyman, Padian, Grant, Samuel, Wiley, Anderson, Lang, Riggs & Levy, *Sexual Practices and Risk of Infection by the Human Immunodeficiency Virus: The San Francisco Men's Health Study*, 257 J. A.M.A. 321, 325 (1987).

18. Eales, Nye, Parkin, Weber, Forster & Harris, *Association of Different Allelic Forms of Group Specific Component with Susceptibility to and Clinical Manifestation of Human Immunodeficiency Virus Infection*, 1 LANCET 999, 999, 1001-02 (1987).

19. Dahl, Martin & Miller, *Differences Among Human Immunodeficiency Virus Strains in their Capacities to Induce Cytolysis or Persistent Infection of a Lymphoblastoid Cell Line Immortalized by Epstein-Barr Virus*, 61 J. VIROLOGY 1602 (1987).

documented,²⁰ but female-to-male transmission is more controversial. Clearly female-to-male transmission occurs, but it has been less frequent in the United States.²¹

The level of risk of contracting HIV from one unprotected sexual contact with an infected partner is thought to be low. One study placed the seroconversion rate at approximately 1/1,000.²² While the use of barrier contraception is not entirely safe, it does provide important protection.²³ Frequent and appropriate use of barrier protection clearly attenuates the rate of seroconversion.²⁴ The risk of contracting HIV in a single sexual encounter while using a condom (assuming 90% effectiveness of such a barrier) is estimated to be 1/10,000.²⁵

Prostitution is a major target of coercive AIDS legislation.²⁶ Yet the primary risk factor for HIV infection in prostitutes in the United States is not sexual practice but intravenous drug use.²⁷ Further, prostitutes often seek to use protection against exchange of body fluids. Their clients appear to pose as significant a health threat to the prostitutes as the prostitutes to their clients. "Scientists are not certain how frequently prostitutes have been infected because of their multiple sexual contacts, or how often they have infected their customers, although the available evidence . . . indicates that this has not occurred on a large scale."²⁸

B. Risk of Transmission by Intravenous Drug Use

Intravenous drug use has a major role in the transmission of HIV.²⁹ IV drug users can spread HIV through their practice of sharing drug "paraphernalia" or "works" (needles and syringes). Sharing of works often occurs in "shooting galleries" where addicts purchase their drugs and rent needles and syringes. The

20. The majority of cases of heterosexual transmission in the United States are women. *Review of Current Knowledge*, *supra* note 3; Friedland & Klein, *supra* note 14, at 1129. HIV is found in semen in relatively large concentrations. See generally Ho, Schooley, Rota, Kaplan & Flynn, *HTLV-III in the Semen and Blood of a Healthy Heterosexual Man*, 226 SCIENCE 451 (1984).

21. In Africa, female-to-male transmission has been well documented. Quinn, Mann, Curran & Piot, *AIDS in Africa: An Epidemiologic Paradigm*, 234 SCIENCE 955 (1986). But the frequency in the U.S. is much less clear. Friedland & Klein, *supra* note 14, at 1129-30.

22. Padian, Wiley & Winkelstein, *Male to Female Transmission of Human Immunodeficiency Virus: Current Results, Infectivity Rates, and San Francisco Population Seroprevalence Estimates*. Presented at the Third International Conference on AIDS, Washington D.C., June 4, 1987. See Padian, Marquis, Francis, Anderson, Rutherford, O'Malley & Winkelstein, *Male-to-Female Transmission of Human Immunodeficiency Virus*, 258 J. A.M.A. 788 (1987).

23. Gostin & Curran, *Response from Gostin & Curran*, 77 AM. J. PUB. HEALTH 1553 (1987).

24. Conant, Hardy, Sernatinger, Spicer & Levy, *Condoms Prevent Transmission of AIDS—Associated Retrovirus*, 255 J. A.M.A. 1706 (1986); Fischl & Dickinson, *supra* note 16, at 641; Voeller & Potts, *Has the Condom Any Proved Value in Preventing the Transmission of Sexually Viral Disease—for Example Acquired Immune Deficiency Syndrome*, 291 BRIT. MED. J. 1196 (1985).

25. Hagen, Myer & Pauker, *Routine Preoperative Screening for HIV: Does the Risk to the Surgeon Outweigh the Risk to the Patient?*, 259 J. A.M.A. 1357, 1358 (1988).

26. See *supra* notes 8-11 and accompanying text for comments on the use of coercive powers.

27. See Rosenberg & Weiner, *Prostitutes and AIDS: A Health Department Priority?* 78 AM. J. PUB. HEALTH 418 (1988); *Antibody to Human Immunodeficiency Virus in Female Prostitutes*, 36 MORBIDITY & MORTALITY WEEKLY REP. 157 (1987) (Table 2); *Review of Current Knowledge*, *supra* note 3, at 8.

28. Altman, *U.S. Study Examines Prostitutes and AIDS Virus*, N.Y. Times, March 27, 1987, at A14, col. 1.

29. Twenty-five percent of all AIDS cases in the U.S. have occurred in IV drug users, and 17% have occurred among those in whom IV drug use is the only risk factor. Friedland & Klein, *supra* note 14, at 1127; *Review of Current Knowledge*, *supra* note 3, at 14.

sharing experience is often part of the culture of the drug dependent population, indicating a sense of camaraderie. Drugs are injected into a suitable vein and thus, when the needle is shared, it is likely to have traces of blood.³⁰ Studies have documented needle sharing as a method of transmission of HIV.³¹ However, it is likely that the amount of blood on the needle is minute.³² Accordingly, the rate of seroconversion in any single case of percutaneous exposure to the needle is likely to be small—ranging from a rate of .03-.09%.³³ However, episodes of injections by individual drug users may number in the thousands, so the cumulative risk of IV drug use is high.³⁴

C. Saliva as a Route of Transmission: Biting and Spitting

HIV has been isolated from saliva.³⁵ The isolation of virus from a body fluid does not necessarily mean that the fluid is a significant mode of transmission. Transmission by biting or spitting, however, continues to be a societal concern, one which has resulted in the filing of criminal charges.³⁶

There are strong grounds for believing the risk of transmission by saliva to be exceedingly low, approaching zero. First, HIV has been isolated in saliva only rarely and in very small amounts.³⁷ It is thought that the risk of transmission from a small inoculum of virus in a single event is remote.³⁸ Second, experiments indicate that both whole saliva and saliva filtrates contain components that inactivate HIV in vitro.³⁹ Third, there has never been a documented case of transmission by saliva, despite close observation and follow-up investigations of cases of biting, spitting, deep kissing, and intimate caring activities.⁴⁰ There has been one report, for example, of an adult patient with AIDS who bit thirty health care workers without any transmission of the virus.⁴¹ Several other follow-up studies of biting have revealed no

30. Friedland & Klein, *supra* note 14, at 1127-28; Ginzburg, *Intravenous Drug Abusers and HIV Infections: A Consequence of Their Actions*, 14 LAW, MED. & HEALTH CARE 268, 269-70 (1986).

31. See generally Chaisson, Moss, Onishi, Osmond & Carlson, *Human Immunodeficiency Virus Infection in Heterosexual Intravenous Drug Users in San Francisco*, 77 AM. J. PUB. HEALTH 169 (1987); Des Jarlais, Friedman & Stoneburner, *HIV Infection and Intravenous Drug Use: Critical Issues in Transmission Dynamics, Infection Outcomes and Prevention*, 10 REV. INFECT. DIS. 151 (1988); Friedland, Harris, Butkus-Small, Shine, Moll, Darrow & Klein, *Intravenous Drug Abusers and the Acquired Immunodeficiency Syndrome (AIDS): Demographic, Drug Use, and Needle-Sharing Patterns*, 145 ARCHIVES INTERN. MED. 1413 (1985).

32. Friedland & Klein, *supra* note 14, at 1128.

33. *Id.* at 1126.

34. *Id.* at 1128.

35. Groopman, Salahuddin, Sarngadharan, Markham, Gorda, Sliski & Gallo, *HTLV-III in Saliva of People with AIDS-Related Complex and Healthy Homosexual Men at Risk for AIDS*, 226 SCIENCE 447 (1984); Hoe, Byington, Schooley, Flynn, Rota & Hirsch, *Infrequency of Isolation of HTLV-III Virus from Saliva in AIDS*, 313 NEW ENG. J. MED. 1606 (1985) [hereinafter Hoe & Byington].

36. See *infra* note 117 and accompanying text.

37. Lifson, *Do Alternative Modes of Transmission of Human Immunodeficiency Virus Exist?* 259 J. A.M.A. 1353 (1988). In one study of men infected with HIV, the virus could be isolated in 28 of 50 samples of blood but in only 1 of 83 samples of saliva. Hoe & Byington, *supra* note 35.

38. Friedland & Klein, *supra* note 14, at 1126-27.

39. Fultz, *Components of Saliva Inactivate Human Immunodeficiency Virus*, 2 LANCET 1215 (1986).

40. See Friedland & Klein, *supra* note 14, at 1132-33; Lifson, *supra* note 37, at 1353-54.

41. Tsoukas, Hadjis, Theberge, *et al.*, *Risk of Transmission of HTLV-III/LAV from Human Bites*, presented at the Second International Conference on AIDS, Paris, June 23-25, 1986.

evidence of HIV transmission.⁴² There are also no documented cases of HIV transmission through kissing or insertive oral-genital contact.⁴³ Fourth, there have been major population studies of households, dentists, and healthcare workers in intimate contact with HIV infected persons, without viral transmission.⁴⁴ Households with an HIV infected member have been studied over a period of years. In these families there were repeated exposures to saliva. They shared eating utensils, plates, drinking glasses, and toothbrushes; towels, linens, and clothes were sometimes soiled with saliva; family members helped patients to eat and drink; and they kissed on the cheek and on the lips. These studies involved nearly five hundred members of various families, yet failed to find a single case of a family member who contracted HIV who did not have an additional exposure through a blood transfusion, sexual relations, or perinatal transmission.⁴⁵

The risk of transmission by saliva has also been studied among dental workers who have had repeated exposure to saliva as well as blood. In one study of 1309 dental professionals (72% of whom treated high risk patients and 94% of whom reported accidental puncture wounds), only one had HIV.⁴⁶ This one report is thought to have been from blood exposure. Other studies have not found another case of transmission to a dentist.⁴⁷

Similar studies have been done with health workers who care for HIV-infected patients.⁴⁸ These studies also have failed to document a case of HIV transmission with parenteral, mucous membrane, or open wound exposures to saliva;⁴⁹ cardiopul-

42. Drummond, *Seronegative 18 Months After Being Bitten by a Patient with AIDS*, 256 J. A.M.A. 2342 (1986). But see Wahn, Kramer, Voit, Bruster, Scrampical & Scheid, *Horizontal Transmission of HIV Infection Between Two Siblings*, 2 LANCET 694 (1986) (Authors conclude one plausible, though unlikely, route of transmission between brothers was through a bite, even though it did not break skin or result in bleeding.).

43. Lifson, *supra* note 37, at 1353-54.

44. These studies are reviewed in: Friedland & Klein, *supra* note 14, at 1131-33; Gostin, Curran & Clark, *supra* note 12, at 22 n.3.

45. Fischl & Dickinson, *supra* note 16; Friedland, Saltzman, Rogers, Kahl, Lesser, Mayers & Klein, *Lack of Transmission of HTLV-III/LAV Infection to Household Contacts of Patients with AIDS or AIDS-related complex with Oral Candidiasis*, 314 NEW ENG. J. MED. 344 (1986); Jason, McDougal, Dixon, Lawrence, Kennedy, Hilgartner, Aledort & Evatt, *HTLV-III/LAV Antibody with Immune Status of Household Contacts and Sexual Partners of Persons with Hemophilia*, 255 J. A.M.A. 212 (1986); Lawrence, Jason, Bouhasin, McDougal, Knutsen, Evatt & Joist, *HTLV-III/LAV Antibody Status of Spouses and Household Contacts Assisting in Home Infusion of Hemophilia Patients*, 66 BLOOD 703 (1985); Mann & Quinn, *supra* note 16; Redfield & Markham, *supra* note 16.

46. Klein, Phelan, Freeman, Schable, Friedland, Trieger & Steigbigel, *Low Occupational Risk of Human Immunodeficiency Virus Infection Among Dental Professionals*, 318 NEW ENG. J. MED. 86 (1988). (Several letters to the editor in response to this article are in 319 NEW ENG. J. MED. 112-14 (1988).).

47. Gerberding, Bryant-LeBlanc, Nelson, Moss, Osmond, Chambers, Carlson, Drew, Levy & Sonde, *Risk of Transmitting the Human Immunodeficiency Virus, Cytomegalovirus, and Hepatitis B Virus to Health Care Workers Exposed to Patients with AIDS and AIDS-Related Conditions*, 156 J. INFECT. DIS. 1, 4 (1987) [hereinafter Gerberding & Bryant-LeBlanc].

48. Gerberding & Bryant-LeBlanc, *supra* note 47; Henderson, Saah, Zak, Kaslow, Lane, Folks, Blackwelder, Schmitt, LaCamera, Masur & Fauci, *Risk of Nosocomial Infection with Human T-Cell Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus in a Large Cohort of Intensively Exposed Health Care Workers*, 104 ANNALS INTERN. MED. 644 (1986) [hereinafter Henderson & Saah]; Hirsch, Wormser, Schooley, Ho, Felsenstein, Hopkins, Joline, Duncanson, Sargadharah, Saxinger & Gallo, *Risk of Nosocomial Infection with Human T-Cell Lymphotropic Virus III (HTLV-III)*, 312 NEW ENG. J. MED. 1 (1985); McCray & The Cooperative Needlestick Surveillance Group, *Occupational Risk of the Acquired Immunodeficiency Syndrome Among Health Care Workers*, 314 NEW ENG. J. MED. 1127 (1986) [hereinafter McCray & Needlestick Group]; Weiss, Saxinger, Rechtman, Greico, Nadler, Holman, Ginzburg, Groopman, Goedert, Markham, Gallo, Blattner & Landsman, *HTLV-III Infection Among Health Care Workers: Association with Needle-Stick Injuries*, 254 J. A.M.A. 2089 (1985).

49. McCray & Needlestick Group, *supra* note 48.

monary resuscitation;⁵⁰ and performance of invasive procedures with direct exposure to saliva.⁵¹ Nearly all documented cases of occupational transmission of HIV in health care settings have been attributed to accidental needlestick injuries or mucous membrane exposure to large amounts of blood.⁵²

Of more than 60,000 cases of AIDS reported to the Centers for Disease Control, none have implicated saliva as a likely cause of transmission.⁵³ One recent reviewer of the medical literature noted that, given these data, the risk of transmission by saliva is still only "theoretical" or "negligible."⁵⁴

D. *An Inoculum of Blood as a Method of Transmission: Hitting, Kicking, Splattering of Blood*

HIV has been isolated in blood.⁵⁵ Blood represents a significant method of transmission when there is a large inoculum.⁵⁶ Thus, transfusions of blood and blood products have been implicated as major routes of transmission.⁵⁷ It is the importance of blood transmissions as a risk factor for AIDS that has worried policy makers about scrapes, bruises, and bleeding occurring while there is physical contact with HIV infected persons. Thus, aggressive acts such as hitting, kicking, or splattering of blood by HIV infected people have been viewed as much more serious than the same behavior by non-infected persons.

These aggressive behaviors, however, do not involve a large inoculum of HIV infected blood into the body. Rather, they often involve either a small inoculum of blood or, more likely, no exposure to blood inside the body.⁵⁸ This shows that a single event of this kind poses a very low, or negligible, risk. The risk of transmission of HIV even after a deep parenteral exposure to infected blood is estimated to be in the range of .03-.09%.⁵⁹

50. Saviteer, White, Cohen & Jason, *HTLV-III Exposure During Cardiopulmonary Resuscitation*, 313 NEW ENG. J. MED. 1606 (1985).

51. Gerberding & Bryant-LeBlanc, *supra* note 47.

52. See *supra* note 48; Allen, *Health Care Workers and the Risk of HIV Transmission*, HASTINGS CEN. REP. 2-5 (April, May 1988); *Recommendations for Prevention of HIV Transmission in Health Care Settings*, 36 MORBIDITY & MORTALITY WEEKLY REP. (Supp. 2) 35 (1987) [hereinafter *Recommendations*, 36, 1987].

53. *Review of Current Knowledge*, *supra* note 3.

54. Lifson, *supra* note 37, at 1354.

55. Barre-Sinoussi, Chermann, Rey, Nugeyre, Chamaret, Gruest, Dauguet & Axler-Blin, *Isolation of a T-Lymphotropic Retrovirus from a Patient at Risk for the Acquired Immune Deficiency Syndrome (AIDS)*, 220 SCIENCE 868 (1983); Gallo, Salahuddin, Popovic, Shearer, Kaplan, Haynes, Palker, Redfield, Oleske, Safai, White, Foster & Markham, *Frequent Detection and Isolation of Cytopathic Retroviruses (HTLV-III) from Patients with AIDS and at Risk for AIDS*, 224 SCIENCE 500 (1984).

56. Friedland & Klein, *supra* note 14, 1126-27.

57. Approximately 3% of adults and 13% of children have acquired AIDS through transfusions. CDC, WEEKLY SURVEILLANCE REP., July 4, 1988. Most transfusion-related cases occurred before screening for HIV antibody was technically possible. It is thought that, with current screening programs, the incidence of transfusion-related infections are low. See Gostin, Curran & Clark, *supra* note 12, at 13-17.

58. Friedland & Klein, *supra* note 14.

59. See Friedland & Klein, *supra* note 14, at 1127 (1987) (placing the average level of risk of HIV transmission at 0.76%). See also Gerberding & Bryant-LeBlanc, *supra* note 47 (a study of 270 health care workers found no evidence of HIV transmission from occupational exposure); Henderson & Saah, *supra* note 48, at 647. McCray & Needlestick Group, *supra* note 48, at 1131; McEvoy, Porter, Mortimer, Simmons & Shanson, *Prospective Study of Clinical, Laboratory, and Ancillary Staff with Accidental Exposures to Blood or Body Fluids from Patients Infected with HIV*, 294

There have been only sixteen reported cases of occupational exposure to HIV.⁶⁰ This appears insignificant, given the frequency of contact between health care workers and infected patients.

The spillage of blood on skin surfaces is not thought to pose a significant risk. But two cases of seroconversion of health care workers from mucous membrane exposures to infected blood⁶¹ raised the level of public anxiety. The fact that these cases occurred demonstrates that HIV can be transmitted through a non-parenteral exposure to blood. However, the two cases involved virtual soaking in blood, without adequate precautions taken such as use of gloves. In each case the health care worker also had significant breaks in the skin allowing access to the virus; blood also soaked through mucous membranes. There is no data quantifying the risk of surface skin exposure to blood. However, it is reasonable to assume the risk is less than that caused by an injection of blood from a contaminated needle. This would place the risk of surface skin exposure even to a large amount of blood well below 1%.⁶²

E. *Conclusion on Risks of Transmission*

There is a strong consensus in the scientific literature that transmission of HIV occurs only through an inoculation of blood, sexual intercourse, or perinatally. The law should carefully reflect this scientific understanding by focusing its interventions on those behaviors which pose significant risks. Even in the area of greatest concern—sexual transmission—the risk of a single event (particularly if barrier protection is utilized) is very low, and probably comparable to other risks which are well accepted in society.

Public concern has often focused on the aggressive behavior of “recalcitrants” who bite, kick, spit, or splatter their blood, because of the theoretical possibility that HIV can be transmitted. Scientists cannot rule out the possibility that these alternative modes of transmission may occur in the future. An unrealistic requirement for absolute certainty persists, despite the knowledge that it is impossible scientifically to prove that an event cannot occur. Society seems prepared to deprive HIV-infected persons of their liberty, under the mantle of public health, for taking remote risks. The exercise of compulsory powers is based upon unproven fears, perhaps prejudices, and not upon rational assessment of scientific facts.

III. ISOLATION

Infection control measures have long rested on the assumption that disease carriers must be physically separated from the rest of the population to prevent

BRI. MED. J. 1595 (1987) (less than 1% chance of developing HIV from a single exposure); *Recommendations* 36, 1987, *supra* note 52, at 3.

60. *See generally id.* (This is a composite total from all of the sources cited.).

61. Barnes, *Health Care Workers and AIDS: Questions Persist*, 241 SCIENCE 161 (1988). *See* Gostin, *Hospitals, Health Care Professionals and AIDS: The “Right to Know” the Health Care Status of Patients and Professionals*, MD. L. REV. (in press); and *Update: Human Immunodeficiency Virus Infections in Health-Care Workers Exposed to Blood of Infected Patients*, 36 MORBIDITY & MORTALITY WEEKLY REP. 285 (1987).

62. *See* Friedland & Klein, *supra* note 14, at 1126–27 1131–33.

transmission of the infectious agent. Although the terms "isolation" and "quarantine" are often used interchangeably, both in public health statutes and in common parlance, there is a technical distinction between them. "Isolation" is the separation of infected persons from others during the period of communicability so as to prevent transmission of the infectious agent; "quarantine" is the detention of persons who are healthy, but have been exposed to a communicable disease, to prevent contact with persons not exposed.⁶³ Since proposals for confining persons with AIDS tend to target persons who already exhibit symptoms of the disease or who demonstrably have been exposed to the virus, the term "isolation" is more appropriate.

Isolation is a particularly antiquated public health notion. It was designed in a very different era and intended for diseases of a character wholly different from that of AIDS. At the time most of these public health statutes were written, the sciences of virology and epidemiology were in their infancy.⁶⁴ A crude tradition of isolation and quarantine of real and suspected cases was the rule, sometimes involving separation of an entire geographic area, although there was no understanding of the mechanism by which the disease spread or how to interrupt it.⁶⁵

Modern public health interventions are founded upon a more sophisticated understanding of disease processes. Science more precisely understands the etiological agents of infectious diseases, the most likely harborers of the agent, the most efficient modes of its transmission, and the methods of modifying behaviors or environments in order to interrupt its spread.

Accordingly, modern measures for reducing the spread of disease are predominantly based upon research, education, and counseling, specifically targeted to groups at risk of spreading or contracting the disease. Public health statutes and judicial review of public health action should reflect these scientific realities by requiring public health measures to interrupt only the most efficient modes of disease transmission. The public health benefit is thus maximized, while restrictions of individual liberty remain limited to those clearly necessary for community health.⁶⁶

AIDS does not display the paradigmatic conditions that call for isolation. HIV is not transmitted by casual contact with others; it is not an airborne disease which is spread by coughing or sneezing; and it is not transmissible by touching, kissing, or other social activities.⁶⁷ AIDS is transmitted only by specific, conscious behavior. Therefore, to isolate those who are infected with HIV, yet who do not engage in this behavior, lacks any useful purpose.

At present, few state public health statutes authorize the isolation of persons with AIDS. Many states authorize the isolation of persons infected with venereal or sexually transmitted diseases, but for the most part AIDS is not so classified.⁶⁸

63. See, e.g., CAL. HEALTH & SAFETY CODE §§ 2520, 2525 (West 1976).

64. See generally, Gostin, *The Future of Public Health Law*, 12 AM. J. L. & MED. 461, 463-65 (1986); Parmet, *AIDS and Quarantine: The Revival of an Archaic Doctrine*, 14 HOFSTRA L. REV. 53 (1985).

65. See, e.g., *Jew Ho v. Williamson*, 103 F. 10 (C.C.N.D. Cal. 1900) (court found that quarantine area was too large and unrelated to effective disease control).

66. See Gostin, *supra* note 64, at 464-65.

67. See *supra* notes 14-62 and accompanying text.

68. W. CURRAN, L. GOSTIN & M. CLARK, *ACQUIRED IMMUNODEFICIENCY SYNDROME: LEGAL AND REGULATORY POLICY ANALYSIS* i-ii, 204-07 (1986, republished by U.S. Dep't of Comm. 1988).

Although AIDS is classified as a communicable disease in many states,⁶⁹ that designation alone does not provide a legal basis for the imposition of personal control measures. Similarly, the fact that all states require that AIDS cases be reported to public health officials does not, in and of itself, provide legal justification for isolating infected persons.⁷⁰

To be sure, many state legislatures have considered bills to make AIDS, and even HIV infection, isolable conditions.⁷¹ A number of these states have already enacted statutes authorizing the isolation of persons with HIV. Some of these statutes do not mention the AIDS virus specifically, but would probably justify the detention of AIDS virus carriers.⁷²

Two different kinds of isolation statute exist: those which authorize confinement on the basis of disease status alone, and those which authorize confinement of infected persons who engage in dangerous behavior. The distinction between antiquated disease-based isolation and more modern behavior-based isolation is pivotal, because one is concerned with an immutable health status, while the other is more directly targeted to prevent dangerous acts.

Isolation, whether disease- or behavior-based, is a uniquely serious form of deprivation of liberty because it can be utilized against a competent and unwilling person without criminal conviction.⁷³ It fully restricts the personal liberty of a rational adult, not out of concern for that person's welfare, but out of concern for the welfare of others. Furthermore, it is a form of preventive confinement based upon what a

69. *Id.* at ii. See generally *id.* at 1-208.

70. *Id.* at ii, 204 (summarizing findings presented at 1-179).

71. Some states specifically mention HIV in the statute, making it an isolable condition. See, e.g., COLO. REV. STAT., §§ 25-4-1401 to -1410 (Bradford Supp. 1987). (When a person is or is reasonably believed to be infected with HIV, the state or local health department may order the person to be examined and tested, to visit a health worker's office for counseling, or to cease and desist from specified dangerous conduct. If a person violates a cease and desist order, personal restrictions can be imposed as necessary to prevent dangerous conduct. A person's failure to comply with the statute can result in a criminal penalty.); 1987 MINN. SESS. LAW SERV., § 209 S.F. No. 1048 (West). Other states simply add HIV to the list of communicable diseases which are isolable, see, e.g., IDAHO CODE § 39-601 (1988), or classify HIV as a sexually transmitted disease subject to isolation, see, e.g., KY. REV. STAT. ANN. § 214.410 (Michie/Bobbs-Merrill 1988). Finally, some states have only considered proposals for making AIDS an isolable disease. These states include Hawaii, South Carolina, and Washington. Virginia and Pennsylvania have both passed gentle probing measures authorizing investigations into the adequacy of existing state laws and regulations for disease control. See generally Gostin & Ziegler, *A Review of AIDS-Related Legislative and Regulatory Policy in the United States*, 15 LAW, MED. & HEALTH CARE 5 (1987); Cuttan, Clark & Gostin, *AIDS: Legal and Policy Implications of the Application of Traditional Disease Control Measures*, 15 LAW, MED. & HEALTH CARE 27 (1987); R. MERRITT, C. THOMAS & A. ZIEGLER, AIDS-RELATED BILLS CONSIDERED IN THE 1986 LEGISLATIVE SESSION (1987); C. THOMAS, A SYNOPSIS OF STATE RELATED LEGISLATION (1987); Sullivan & Field, *supra* note 1, at 144 n.18.

72. See, e.g., 1987 ALA. CODE § 22-11A-18 (Supp. 1988) (authorizes public health officials to isolate persons with sexually transmitted diseases if they may expose others to the disease and confinement is necessary to protect the public health); CONN. GEN. STAT. ANN. § 19a-221 (West 1986) (authorizes each health director to order an individual confined if there are reasonable grounds to believe he or she is infected with a communicable disease and is unwilling or unable to act in a manner so as not to expose others); FLA. STAT. ANN. § 384.28 (West Supp. 1988) (authorizes public health authorities to isolate a person to prevent the "probable spread of a sexually transmitted disease, until such time as the condition can be corrected or the threat to the public health is eliminated or reduced.") IND. CODE ANN. § 16-1-9.5-4 (West Supp. 1988) (allows the secretary for health or local health officers to restrict people who have a communicable disease and who may be endangering the public health).

73. See generally, Curran, Clark & Gostin, *supra* note 71; Ford & Quam, *AIDS Quarantine: The Legal and Practical Implications*, 8 J. LEGAL MED. 353 (1987); Gostin, *Traditional Public Health Strategies*, in AIDS AND THE LAW: A GUIDE FOR THE PUBLIC 47 (H. Dalton & S. Burris eds. 1987); Merritt, *Communicable Disease Control and Constitutional Law: Controlling AIDS*, 61 N.Y.U. L. REV. 759 (1986); Parmet, *supra* note 64; Sullivan & Field, *supra* note 1.

person *might* do rather than what he or she has already done. Isolation, therefore, relies upon predictions of dangerousness. The law is usually loath to confine individuals for acts they have yet to commit,⁷⁴ especially when these individuals are rational and competent adults, and their behavior is assumed to conform to legal standards. Even more telling is the fact that isolation has no temporal limitation; indeed, inasmuch as seropositive people are presumed to be infectious for the rest of their lives, isolation amounts to a kind of civil life sentence. Unlike a criminal sentence, however, the duration of isolation is not necessarily proportionate to the gravity of the behavior. Rather, consensual sexual behavior (or even less serious acts such as spitting or biting) could result in lifelong confinement. State legislators and public health authorities ought to consider these adverse consequences before they adopt isolation.

Next, I review two legal prerequisites for any program of isolation—that procedural due process must be afforded before exercising a power to isolate an individual, and that the place of isolation should do no harm to the subject. I will then further consider the constitutionality and merits of programs for disease-based and behavior-based isolation.

A. *Procedures for Fair and Impartial Decision Making*

In addition to specifying standards for restraining individuals, a scheme for the control of communicable disease must identify the decision makers and describe a process for gathering information and making fair and correct decisions. Most state statutes delegate wide discretion to public health officials without carefully considering procedural safeguards designed to achieve both a more accurate fact finding process and greater fairness to the individual whose liberty is to be restrained.

Many public health statutes are either silent or wholly inconsistent in their provision of procedural due process protections to subjects of compulsory powers. California law, for example, authorizes the California Department of Health Services to identify and then quarantine or isolate individuals having a communicable disease whenever, *in its judgment*, such action is necessary to protect or preserve the public health.⁷⁵ Similar language is found in many public health statutes across the country.⁷⁶

A few statutes do mandate application to a judge or magistrate for an order of isolation or quarantine, but fail to specify any other procedural requirements.⁷⁷ Even

74. The U.S. Supreme Court has upheld preventive detention of persons charged with offenses. *United States v. Salerno*, 107 S. Ct. 2095, 2101–02 (1987) (preventive confinement for persons on bail); *Schall v. Martin*, 467 U.S. 253 (1984) (preventive confinement of persons charged with juvenile offenses). It has also repeatedly upheld the detention of persons who are mentally ill and thought dangerous. *See, e.g., Youngberg v. Romeo*, 457 U.S. 307 (1982); *O'Connor v. Donaldson*, 422 U.S. 563, 575 (1975). But barring such special circumstances the Court has traditionally been suspect of preventive confinement.

75. CAL. HEALTH & SAFETY CODE § 3051 (West 1979).

76. *E.g.,* FLA. STAT. ANN. § 384.28(1) (West Supp. 1988); N.J. STAT. ANN. § 26:4-2 (West 1987). *But see* CONN. GEN. STAT. ANN. § 19a-5 (West 1986) (duties of Public Health Commissioner more detailed).

77. *See, e.g.,* N.Y. PUB. HEALTH LAW § 2301 (McKinney 1985). For example, the court in *State v. Snow*, 230 Ark. 746, 324 S.W. 2d 532 (1959) was able to thwart a state effort to quarantine an individual for tuberculosis only because initial judicial approval was required by the authorizing statute before enforcement could take place.

statutes recognizing the importance of an impartial fact finder for an order of isolation or quarantine do not provide procedural safeguards prior to the exercise of other compulsory powers, such as mandatory physical examination, treatment, or contact tracing. Several statutes originating in the 1940s identify specific categories of individuals who may be required to undergo venereal disease examination by a public health officer.⁷⁸ The applicable New Jersey statute, for example, presumes that a prostitute "or other lewd person" may reasonably be suspected of having a venereal disease and may therefore be subjected to examination at any time without a hearing.⁷⁹

These statutory provisions survive only because they have yet to be challenged in the courts. In contrast, mental health statutes before the 1970s which failed to require rigorous due process procedures were found to violate the due process clause of the fourteenth amendment.⁸⁰ Since then, mental health cases have required notice and a hearing before a judge and have established a right to counsel.⁸¹ The standard of proof constitutionally required at civil commitment hearings is more than a preponderance of evidence; rather, it must demonstrate "clear and convincing evidence."⁸²

Courts in the current process-oriented era of constitutional review would most likely require procedural safeguards prior to or—in an emergency—immediately after the exercise of personal control measures. In determining the kinds of procedures required under the fourteenth amendment, the courts balance the interests of the state with those of the individual.⁸³

The state's interest in protecting the public from serious harm is compelling. The interest of the individual grows in proportion to the level of coerciveness of the public health measure to be applied. When a control measure, such as isolation, infringes upon liberty, the courts will likely require strict procedural due process safeguards in light of the deep invasion of personal rights, the risk of erroneous fact-finding, and the importance of avoiding confinement of nondangerous persons.

The West Virginia Supreme Court reasoned in *Greene v. Edwards*⁸⁴ that there is little difference between loss of liberty under mental health and public health rationales. In each instance, the exercise of police power and the subsequent loss of the individual's freedom are justified by the protection of the common good. Prospective subjects of isolation or quarantine are therefore entitled to the same procedural safeguards as persons facing civil commitment: written notice, counsel,

78. *E.g.*, N.J. STAT. ANN. §§ 26:4-32 (West 1987) (applicable to prostitutes), *id.* § 26:4-49.6 (applicable to migrant workers).

79. *Id.* § 26:4-32 (West 1987).

80. *See, e.g.*, Suzuki v. Yuen, 617 F.2d 173, 178 (9th Cir. 1980); Colyar v. Third Judicial Dist. Court, 469 F. Supp. 424, 429-30 (D. Utah 1979); Lessard v. Schmidt, 349 F. Supp. 1078 (E.D. Wis. 1972); *In re Seefeld*, 2 MENTAL DISABILITY L. REP. 363 (Wis. Cir. Ct. 1977) (sequel to *Lessard* in which the Wisconsin statute enacted in response to *Lessard* was held unconstitutional).

81. *Vitek v. Jones*, 445 U.S. 480, 488 (1980) (inmate has liberty interest in preventing transfer from prison to mental institution).

82. *Addington v. Texas*, 441 U.S. 418, 431-33 (1979) ("clear and convincing proof" may be required for indefinite involuntary commitment).

83. *Mathews v. Eldridge*, 424 U.S. 319, 334-35 (1976).

84. 263 S.E.2d 661 (W. Va. 1980).

presentation of evidence, cross examination, a "clear and convincing" standard of proof, and a verbatim transcript for appeal.

The state need not, however, go so far as to provide the procedural safeguards of a criminal trial.⁸⁵ Rather, the foregoing procedural requirements should be built into public health statutes. Prior to or—in cases of urgent necessity—immediately after the imposition of personal control measures, an impartial decision maker should hear the case. This function belongs within the jurisdiction of the courts. The states should bear the burden of providing a hearing, and the potential subject of control measures should have the right to be represented by counsel to examine critically the grounds and evidence upon which decisions are made. The individual should not be left to discover after-the-fact remedies such as habeas corpus.

State legislatures should give careful thought to these procedural safeguards designed to achieve both a more accurate fact-finding process and greater fairness to the individual whose liberty is to be restrained. Procedural due process does not merely protect the individual; it also ensures high quality decision making where a complete and structured body of information is presented to a dispassionate decision maker. Such hearings provide an opportunity for public health officials to review their general strategy for controlling disease epidemics and to apply that strategy in particular cases.

Society has yet to employ its legislature to delimit the circumstances under which important public health decisions should be made. Because public health is one of the very few reasons for which individual liberty can be restricted absent the commission of a criminal offense, it is essential that legislatures guide officials to understand clearly, and to apply fairly, decision making criteria and procedures.

B. *Safe Environment for Isolation*

Even if otherwise constitutional, the question arises whether isolation measures may themselves be allowed to pose a health risk to their subjects. Although the court in *Kirk v. Board of Health*⁸⁶ was quite prepared to uphold an isolation scheme despite the absence of proof that the form of leprosy from which Mary Kirk was suffering was contagious, it nevertheless refused to subject her to an environment it considered unsafe. Public health officials had planned to quarantine Kirk in a pesthouse, "a structure of four small rooms in a row, with no piazzas, used heretofore for the isolation of negroes with smallpox, situated within a hundred yards of the place where the trash of the city . . . is collected and burned." The court concluded that "even temporary isolation in such a place would be a serious affliction and peril to an elderly lady enfeebled by disease, and accustomed to the comforts of life."⁸⁷ The public health department was compelled to delay isolating her until it had finished building Kirk a "comfortable cottage" outside the city limits.

A more modern court, however, was less rigorous in reviewing the conditions

85. See *id.* at 662.

86. 83 S.C. 372, 65 S.E. 387 (1909).

87. *Id.*, 65 S.E. at 391.

of isolation. In *Ex parte Martin*,⁸⁸ a 1948 California case, county officials had elected to isolate people with venereal disease in a jail, despite uncontested evidence that the jail was overcrowded and had been condemned by a legislative investigating committee. The court supported the attorney general's position that "[w]hile jails, as public institutions, were established for purposes other than confinement of diseased persons, occasions of emergency or lack of other public facilities for quarantine require that jails be used."⁸⁹

The use of the jail as a place of isolation and the absence of any rigorous demonstration that the persons isolated were actually infected with venereal disease imply that punishment was an underlying purpose in *Martin*. Punishment, however, is not an appropriate public health goal. Public health departments have an obligation not to do unnecessary harm, and that extends to avoiding unsafe or punitive environments for subjects of an isolation. Indeed, those who must forego their individual rights for the collective good should receive the best possible care and conditions. While no recent case tests the issue of a safe environment for isolation; the general trend towards insisting that health-law measures be rooted in medical considerations strongly suggests that courts will reject any isolation scheme which, like that in *Martin*, has punitive overtones.

The requirement to provide a safe and humane environment for isolation poses special problems in the AIDS context. The two options are to provide separate facilities or to integrate individuals in currently existing prisons, hospitals, mental hospitals, or other health care or criminal justice facilities. Providing separate facilities for infected persons sends a harmful message to the general public that the state is establishing "AIDS colonies." This gives the wrong impression that AIDS is transmitted from simple association with infected persons and that segregation from other populations is desirable.

Segregated facilities must also be built or re-adapted, and adequately financed and staffed. It would be difficult to recruit guards, health care and social workers, and counselors to designated AIDS facilities. Segregated facilities must be clean, sanitary, and otherwise provide a healthful, nonviolent environment. If, for example, segregated individuals are exposed to violence, sexual advances, or drug use in the facility, it could be harmful to their future health. Scientists do not entirely understand the means by which a person progresses from HIV-positivity to AIDS-related complex to AIDS. It is certainly possible that re-infection with the AIDS virus will increase the progression from dormancy of the virus to serious symptomology and death.

Use of integrated facilities would pose different problems. Residents and staff of hospitals, mental hospitals, nursing homes, and even prisons often do not want to be integrated with persons with HIV. This is particularly so if such individuals have been selected because of their irresponsible behavior. Many will rightly argue that their facilities have limited resources and training to deal with HIV infected patients.

88. 83 Cal. App. 2d 164, 188 P.2d 287 (1948).

89. *Id.* at 170, 188 P.2d at 291 (quoting 4 Op. Att'y Gen. 146, 148).

Furthermore, the facilities may argue that they were not designed or intended for this purpose. Prison authorities believe they have insufficient medical and nursing resources to treat terminally ill and infectious inmates; hospitals and nursing homes argue that they should not have a social control role of confining aggressive persons; mental hospitals argue that they cannot provide effective treatment for AIDS dementia.

If a policy of coercive action is socially beneficial, then government will engage in effective planning and resource allocation to solve many of these significant practical problems. However, given the antipathy of public health authorities toward coercive action to control a disease epidemic, it is unlikely that any of these pragmatic issues will be resolved. This places a large question mark over any program seeking systematic application of criminal or civil sanctions for AIDS transmission.

C. Disease or Status-Based Isolation

A disease, or status-based, isolation would reach all those who test positive for HIV or have CDC-defined AIDS.⁹⁰ Such an isolation would cause unimaginable hardship, dislocation, and human, as well as social, cost. No state has seriously proposed a general isolation, and it is highly unlikely to take place in the United States. However, disease-based isolation has already occurred in Cuba⁹¹ and is a seriously considered option in other countries.

Traditionally, the courts have been highly deferential to public health measures, including isolation and quarantine.⁹² However, it is widely agreed that a disease-based isolation would most probably be held unconstitutional under modern doctrine.⁹³

Isolation impacts on liberty and travel, rights which the Supreme Court has held to be fundamental.⁹⁴ The Court would therefore evaluate an AIDS isolation statute under strict scrutiny. While the Court's strict scrutiny analysis often signals its intent to hold the measure unconstitutional, that need not always be the case. The Court requires the state to have a compelling interest,⁹⁵ and to achieve that interest by means which are narrowly tailored and minimally restrictive.⁹⁶ Impeding the spread

90. The eighth amendment's ban on cruel and unusual punishment forbids criminal punishment for the status of being ill. *Robertson v. California*, 370 U.S. 660, 666 (1962). But the eighth amendment would not apply to isolation, civil commitment, or preventive detention because they are regarded as regulatory, not punitive. See Sullivan & Field, *supra* note 1, at 146.

91. Betancourt, *Cuba's Callous War on AIDS*, N.Y. Times, Feb. 11, 1988, at A35, col. 2. See S. FLUSS, TABULAR INFORMATION ON LEGAL INSTRUMENTS DEALING WITH AIDS AND HIV INFECTION, SPA/HLE/87.1 (Available from WHO, Geneva).

92. See Burris, *Fear Itself: AIDS, Herpes, and Public Health Decisions*, 3 YALE L. & POL'Y REV. 479 (1985); Curran, Clark & Gostin, *supra* note 71, at 32; Gostin, *The Future of Communicable Disease Control: Toward a New Concept in Public Health Law*, 64 MILBANK MEMORIAL FUND Q. (Supp. 1) 79, 85-88 (1986) [hereinafter Gostin, *Future Communicable Disease*]; Gostin, *supra* note 64, at 464-68; Merritt, *supra* note 73, at 776-83; Parmet, *supra* note 64.

93. Gostin, *supra* note 64, at 468-71; Merritt, *supra* note 73 at 778-83; Parmet, *supra* note 73; Sullivan & Field, *supra* note 1, at 146-52; Note, *The Constitutional Rights of AIDS Carriers*, 99 HARV. L. REV. 1274, 1281-84 (1986).

94. *Addington v. Texas*, 441 U.S. 418, 425 (1979) (standard of proof for civil commitment for the mentally ill); *Shapiro v. Thompson*, 394 U.S. 618, 629-30 (1969) (citing *United States v. Guest*, 383 U.S. 745, 757-58 (1966)).

95. See *Korematsu v. United States*, 323 U.S. 214, 218 (1944) (only the gravest imminent danger to public safety can justify forced removal from one's home).

96. See Note, *Developments in the Law—Equal Protection*, 82 HARV. L. REV. 1065, 1084-86 (1969).

of AIDS is certainly a state interest which is sufficiently strong to survive heightened judicial scrutiny.⁹⁷

But a status-based isolation would be substantially overinclusive. It would indiscriminately sweep in its wake not only those who spread the disease, but also many who do not. Screening of low-risk populations can generate significant numbers of false positives⁹⁸—*i.e.*, persons who test positive but who do not harbor the virus. In addition, some individuals who do harbor the virus are no longer infectious because the virus has eliminated its host cells.⁹⁹ Even for those who are truly infectious, the great majority will not be dangerous. Some are children. Some are involved in monogamous relationships, and would inform their partners and use barrier protection against the exchange of body fluids. Still others are too debilitated or demoralized to engage in any high risk activity. To assume that all persons who test positive for HIV antibodies are dangerous, and to confine them, potentially for life, would be a substantially overbroad policy.

Status-based isolation could also be substantially underinclusive. In order to reach everyone capable of transmitting the AIDS virus, public health authorities would have to test the entire population periodically.¹⁰⁰ This would be such a costly policy that politicians would more narrowly draw the boundaries of coercive action. These boundaries might be based on having CDC-defined AIDS, or on membership in a high risk group. Targeting persons with AIDS or in high risk groups for special treatment would exclude growing numbers of people with infection who are heterosexual, blood transfusion recipients, hemophiliacs, and others.¹⁰¹

The courts do not always view underinclusiveness as a serious constitutional flaw.¹⁰² Nothing prevents a state from devising a public health solution which is only partially effective. But sometimes the courts find that underinclusiveness is so arbitrary as to deny equal protection.¹⁰³ As one commentator observes, underinclusiveness casts doubt on the sincerity of the public objective: "Where a quarantine is mapped out along the boundaries of a group that is independently the object of fear, prejudice and hatred, there is reason for skepticism."¹⁰⁴ The fact that status-based isolation would impact exclusively or disproportionately on IV drug users, gays, and

97. See *Jacobson v. Massachusetts*, 197 U.S. 11, 25 (1905).

98. The ELISA test for HIV antibodies produces false positive results ranging from 1/3 to 2/3 of all cases in a low risk population. This figure can be substantially reduced with confirmatory testing. See Barry, Cleary & Fineberg, *Screening for HIV Infection: Risks, Benefits and the Burden of Proof*, 14 LAW, MED. & HEALTH CARE 259, 262-63 (1986); Cleary, Barry, Mayer, Brandt, Gostin & Fineberg, *Compulsory Premarital Screening for the Human Immunodeficiency Virus: Technical and Public Health Considerations*, 258 J. A.M.A. 1757, 1758 (1987); Gostin, Curran & Clark, *supra* note 12, at 11-13.

99. Leeson, *HTLV-III Antibody Tests and Health Education*, 1 LANCET 911 (1986).

100. Since so many persons infected with HIV and capable of transmitting the virus are symptomless, the only systematic method of identifying them would be widespread population screening. This would be a highly costly and fruitless public health intervention. See Cleary, Barry, Mayer, Brandt, Gostin & Fineberg, *supra* note 98, at 1761; Gostin, *Screening for AIDS: Efficacy, Cost and Consequences*, 2 AIDS AND PUB. POLICY J. 14 (1987); Gostin, Curran & Clark, *supra* note 12, at 19-24.

101. See *Review of Current Knowledge*, *supra* note 3.

102. See Note, *supra* note 96, at 1065, 1084-86.

103. *Id.*

104. Sullivan & Field, *supra* note 1, at 149.

racial minorities¹⁰⁵ who are independently disfavored communities calls into question whether the true reason for this isolation is public health at all. The suspicion would persist whether the same policy of deprivation of liberty on a massive scale would be applied to more favored social groups.¹⁰⁶

There are numerous public policy reasons against a disease-based isolation which can be added to the constitutional arguments. These policy reasons flow from the unique combination of scientific findings relating to HIV. First, the sheer number of people capable of transmitting the virus, estimated at up to 1.4 million and growing,¹⁰⁷ would make a general isolation prohibitively expensive and wholly unmanageable. Huge practical problems would arise in identifying infected persons with initial and confirmatory tests, and then housing and caring for them, all at public expense. Second, retroviruses like HIV usually live in the carrier for life. There is no finite incubation period, so carriers of the virus are presumed chronically infectious.¹⁰⁸ Confinement of carriers, if it is to be truly effective, must be indefinite. A program of confinement of a person with HIV, therefore, must count on the fact that it can be potentially life-long. Such extensive restriction of personal liberty for behaviors which are part of the human biological function appear excessive. Third, there is no preventive or curative treatment for HIV infection. Those whose liberty is infringed, therefore, would have no way to restore themselves to normal conditions in order to re-join the community. Finally, because casual contact does not spread the virus, segregation from society is unnecessary and, by definition, overly restrictive. Taken together, these factors set AIDS apart from other communicable diseases that have been the subject of traditional personal control measures and make status-based isolation a singularly inappropriate policy.

105. The cumulative incidence of AIDS cases is disproportionately high among blacks (3.0 to 1) and Hispanics (2.6 to 1) compared with whites. When homosexual and bisexual men with AIDS are excluded, the ratio of AIDS case incidence is 12.0 to 1 for blacks, and 9.3 to 1 for Hispanics as compared with whites. *Review of Current Knowledge*, *supra* note 3, at 36. The reasons for this recurring racial disproportion of infection, whether behavioral or biological, are not yet apparent. The higher rate of IV drug use among black and Hispanic groups may be a factor, but there remains a racial disproportion even among IV drug users. See Greaves, *The Black Community*, in *AIDS AND THE LAW: A GUIDE FOR THE PUBLIC* 281-82 (H. Dalton & S. Burris eds. 1987); *Acquired Immunodeficiency Syndrome (AIDS) Among Blacks and Hispanics—United States*, 35 *MORBIDITY & MORTALITY WEEKLY REP.* 655, 666 (1986).

106. There are several significant reasons why a court might not find under-inclusion unconstitutional in the AIDS context. The argument that isolation denied equal protection of the laws to gays or IV drug users falters on the Supreme Court's jurisprudence refusing to find either group to be a suspect class. In *Bowers v. Hardwick*, 478 U.S. 186 (1986), the Supreme Court held that the states could constitutionally criminalize sodomy. The Court found no privacy interest in homosexual relations and no reason to use heightened scrutiny because of the traditionally disfavored status of gays. For strong arguments in favor of making homosexuality a suspect classification, see Note, *The Constitutional Status of Sexual Orientation: Homosexuality as a Suspect Classification*, 98 *HARV. L. REV.* 1285 (1985); Note, *An Argument for the Application of Equal Protection Heightened Scrutiny to Classifications Based on Homosexuality*, 57 *S. CAL. L. REV.* 797 (1984). In *New York City Transit Authority v. Beazel*, 440 U.S. 568 (1979) the Court upheld a transit authority decision to exclude methadone users from employment. The Court found no reason to find drug users as a suspect class despite the fact that they are often poor and black or Hispanic. Finally, the Supreme Court has been loath to find that disproportional representation of minority groups is a reason for special scrutiny. So long as the class is not drawn on racial lines the court has looked the other way despite overwhelming evidence of disproportionate impact on minorities. See *McCleskey v. Kemp*, 107 S. Ct. 1756 (1987) (upholding death penalty despite the fact that it was used in many more cases of black offenders).

107. See *supra* note 3.

108. See Curran & Morgan, *supra* note 5, at 1354; Fauci, *The Human Immunodeficiency Virus: Infectivity and Mechanisms of Pathogenesis*, 239 *SCIENCE* 617, 621 (1988).

D. *Modified Isolation Based upon Behavior, not Disease Status*

The terms "incurrable" and "recalcitrant" have been used to refer to persons who are aware that they have been exposed to the AIDS virus, yet continue to engage in high-risk activities that expose others to the disease, despite warnings by doctors and health officials to modify their behavior. Numerous cases have been publicized of individuals brazenly announcing their intentions to continue to infect others through prostitution, sexual intercourse, needle sharing, or donating blood.¹⁰⁹ Those who engage in such seriously dangerous behavior are often well aware of the consequences of that behavior, and can be predicted to continue it. These people are widely regarded as blameworthy. If confinement is the only way to prevent an unmistakable risk to the public, then no one could reasonably deny the state's right to intervene.

The rationale for behavior-based isolation is a mix of prevention and retribution. Like traditional isolation, it is designed to be forward-looking in preventing future disease transmission. But its reliance upon past dangerous behavior has an element of retribution similar to that found in the criminal law. Apart from its purported objective of slowing the spread of AIDS, behavior-based isolation offers society an outlet for its frustration and anger towards AIDS carriers by restricting the liberty of a few individuals who are visibly evil and worthy of condemnation for fueling the epidemic. In truth, as we shall see, it will have very little positive effect on the epidemic.

Recognizing the practical and legal problems with general isolation, state authorities have begun to revise their isolation proposals to encompass only incurrable cases. This is politically much easier because it is far less expensive, and targets only individuals who are universally seen as culpable.

While general isolation measures would be deemed unconstitutional by the courts, most commentators agree that a narrowly drawn behavior-based isolation would probably be upheld.¹¹⁰ Modified isolation, unlike general isolation, does not focus on a person's health status, but upon his or her behavior. It is aimed at a small number of individuals rather than a sizeable class of persons united by a common characteristic. It is difficult to envisage a court striking down a well-focused public health measure, when there is clear evidence available that an individual is likely to engage in behavior leading to transmission of a potentially lethal virus.

The courts have consistently upheld civil confinement of persons shown to be dangerous in the public health¹¹¹ and mental health¹¹² contexts. Such statutes, while

109. Stephanie Smith, for example, was shunned by her drug treatment facility when it discovered she was HIV positive. She dropped out of treatment. She told public health officials that she was sharing her needles without cleaning them and engaging in prostitution without taking precautions or informing her clients. Lewin, *supra* note 1. See Squires, *supra* note 1; Boorstin, *supra* note 1.

110. See Sullivan & Field, *supra* note 1, at 152-56; Merritt, *supra* note 71; Parmet, *supra* note 64; Gostin, *Future Communicable Disease*, *supra* note 92, at 91-95. But see Note, *supra* note 93.

111. See, e.g., Greene v. Edwards, 261 S.E.2d 661 (W. Va. 1980); State *ex rel.* Kennedy v. Head, 182 Tenn. 249, 185 S.W.2d 530 (1945); *In re Caselli*, 62 Mont. 201, 204 P. 364 (1922); Crayton v. Larabee, 220 N.Y. 493, 116 N.E. 355 (N.Y. 1917), *aff'd* 147 N.Y.S. 1105; Kirk v. Wyman, 83 S.C. 372, 65 S.E. 387 (1909); Hurst v. Warner, 102 Mich. 238, 60 N.W. 440 (1894). See also, Merritt, *supra* note 73, at 776-78.

112. See, e.g., O'Connor v. Donaldson, 442 U.S. 563 (1975).

attracting heightened scrutiny, would achieve a powerful state interest in a way which focuses only on the dangerous and not on those unlikely to engage in high-risk behavior. The dangerous acts, moreover, are often criminal in themselves—prostitution, sodomy, or drug use.

Even if courts were to uphold limited behavior-based isolation, distinct public policy reasons make them weak candidates for implementation. Behavior-based isolation suffers from some of the same defects as does general isolation. If the target is unable to alter his or her behavior, modified isolation is likely to mean permanent confinement. Further, isolation is far more intrusive and restrictive than would be the provision of drug treatment (where appropriate), physiological or medical treatment, counseling, or economic assistance designed to alleviate or alter the conditions that lead to “incurable” behavior.

The objective of isolation is to prevent future risky behavior. It may do so in individual cases, but will probably have an overall adverse impact on the wider high risk populations. Isolation statutes would discourage members of high risk groups from seeking testing or treatment, or speaking honestly to counselors concerning their behavioral intentions. If the certain legal consequence of a person confiding his future intentions is loss of liberty, then individuals would avoid contact with health care professionals and public health programs. The cost, therefore, of preventing a few cases of HIV transmission through isolation may be to undermine public health efforts for broad population changes in behavior. While the objective is to impede the spread of HIV, coercive measures could drive the epidemic underground, thereby defeating the purpose.

Objective statutory and psychological criteria are inadequate to determine accurately enough who is “recalcitrant” or to predict behavior. Even for those who are mentally ill, psychiatrists are still unable to predict dangerous behavior with anything better than random accuracy.¹¹³ There is no reason to believe that behavioral scientists could predict future behavior in the public health context any better. In other words, individuals who declared an intention to engage in high-risk behavior could not be reliably distinguished from those who forswore unsafe conduct.

Those who come to the attention of public officials as candidates for isolation are a small fraction of the total infected population. This small part of the total at-risk population is likely to be the poorest, least articulate of those harboring the virus. Such a skewed “lottery” would have a negligible impact on the spread of the disease because the vast majority of instances of transmissions would continue to go unnoticed. While isolation would lead to the impression that the state was “getting tough” on AIDS transmission, in reality it would not scratch the surface of the epidemic.

This may well lead authorities to widen the net of those subject to behavior-

113. See, e.g., E. MONAHAN, *PREDICTING VIOLENT BEHAVIOR: AN ASSESSMENT OF CLINICAL TECHNIQUES* (1981). In *Barefoot v. Estelle*, 463 U.S. 880 (1983), the Court upheld the death penalty based upon a psychiatric prediction of dangerousness. This provoked Justice Blackmun to observe in dissent, based upon an amicus brief from the American Psychiatric Association, that predictions of dangerousness are wrong “two out of three” times. *Id.* at 920. “In the present state of psychiatric knowledge this is too much for me.” *Id.*

based isolation. Public health authorities may seek to sweep in HIV-infected persons attending bathhouses or gay bars, prostitutes, and IV drug users attending shooting galleries. Large numbers of unpopular individuals are perceived, but not proved, to be dangerous. If a public place such as a bathhouse is demonstrated to be a public health hazard, the state can exercise its regulatory power to closely supervise its activities or close it down. But a decision to confine all those who attend such facilities would be overly restrictive and prejudicial to the nondangerous.

State intervention to prevent seriously dangerous behavior of "incurables" through isolation measures appears justified. However, the policy would be ineffective, perhaps counterproductive, in controlling the AIDS epidemic, and may easily include a wider net of nondangerous persons. Below, I explore the efficacy and fairness of using a retributive criminal law model to deal with a public health problem.

IV. CRIMINALIZATION OF HIV TRANSMISSION

There is a powerful appeal in using the criminal law as a method of containing the spread of AIDS. The criminal law is well used to sanctioning blameworthy individuals for their dangerous acts. The justification of the criminal law is commonly understood to be retribution for past behavior. Yet, one of the principal objectives of the criminal law is the prevention of future acts. By establishing explicit penalties, the criminal law seeks to deter individuals from engaging in certain clearly specified behavior. The transmission of a potentially lethal infection with forethought or recklessness is just as dangerous as other behavior the criminal law already proscribes. It is not unreasonable for society to establish clear parameters as to the behaviors it will not tolerate. By drawing a bright line around the behaviors that pose serious public health risks, the law gives clear notice of the conduct which will be subject to criminal penalty.

This approach can hardly be considered unfair to those individuals in high-risk groups for AIDS because it protects these groups against the spread of infection. Nor can it be considered unfair to the few whose behavior subjects them to criminal penalties, for it is better to give clear forewarning of unacceptable conduct rather than to confine a person who might engage in that behavior in the future.

The criminal law has many advantages over the personal control measure most likely to survive judicial scrutiny—behavior-based isolation. Whereas isolation statutes employ such general terms as "incurability" and "recalcitrance," criminal statutes must specify the behavior that is prohibited. If its language is vague, a criminal statute fails to forewarn, and is for that reason unconstitutional. Whereas isolation statutes arise from predictions about the future, criminal statutes focus on behavior that has already occurred. Whereas "incurability" and "recalcitrance" need only be proved by clear and convincing evidence, each element of a crime must be proved beyond a reasonable doubt. Whereas the period of isolation is usually indefinite, the period of criminal confinement is usually finite and proportionate to the gravity of the offense. As a deterrent, the period of confinement should not last longer than necessary to discourage future reckless behavior, both by the person detained and by others who take note of his or her plight. The longer the period of

confinement, the more it smacks of retribution, a goal inconsistent with the mission of public health authorities.

There is an attraction based upon clarity, objectivity, and sufficient safeguards which makes the criminal law a good candidate for public health consideration. This attraction of the criminal law has not escaped policy makers. The Presidential Commission on the Human Immunodeficiency Virus Epidemic noted that "[e]xtending criminal liability to those who knowingly engage in behavior which is likely to transmit HIV is consistent with society's obligation to prevent harm to others and the criminal law's concern with punishing those whose behavior results in harmful acts."¹¹⁴

The Presidential Commission report has been published in a political climate which has already heavily utilized the general criminal law in combatting the spread of AIDS. A conservative estimate is that there have been fifty to one hundred criminal cases brought relating to HIV transmission, which vary greatly in gravity.¹¹⁵

First, many cases have been brought against individuals who knew they were infected with HIV and had sexual intercourse without informing their partner. Several

114. REPORT OF THE PRESIDENTIAL COMMISSION ON THE HUMAN IMMUNODEFICIENCY VIRUS EPIDEMIC 130-31 (U.S. Gov't Printing Off., June 24, 1988) [hereinafter PRESIDENTIAL COMM'N REP.]. The Commission does not favor use of the general criminal law, but adoption of an AIDS-specific criminal statute. See *infra* notes 115-34 and accompanying text. The Presidential Commission was established under Exec. Order No. 12,601, 3 C.F.R. 238 (1987), amended by Exec. Order No. 12,603, 3 C.F.R. 238 (1987). The American Medical Association and the Institute of Medicare have also recommended the rare use of coercive powers. American Medical Association, Council on Ethical and Judicial Affairs, *Ethical Issues Involved in the Growing AIDS Crisis*, 259 J. A.M.A. 1360, 1361 (1988) [hereinafter A.M.A. Council] (recommendation 17—given the risk of infection being transmitted sexually, and given the dire potential consequences of transmission, serious consideration should be given to sanctions for past dangerous sexual acts); UPDATE 1988, *supra* note 3, at 83 (the use of the criminal law will not address the core problems, but in "rare instances" the state should restrict personal liberties).

115. See, W. CURRAN, L. GOSTIN, & M. CLARK, *supra* note 68, at 344-48 (in which are discussed *People v. Richards*, 85-1715 FG, where HIV-infected person charged in Flint, Michigan with assault and intent to commit murder after he spat on four police officers; *People v. Prairie Chicken*, CRE-77357, where person suspected of having AIDS in El Cajon, California pleaded guilty to a felonious assault for biting an officer; *People v. Julius*, 761210, where a person suspected of carrying HIV pleaded guilty to a misdemeanor assault in San Francisco after prosecutor abandoned plans to file felony charges over another police biting incident); Lacayoh, *Assault with a Deadly Virus*, TIME, July 20, 1987, at 63 (reporting several cases of criminal charges relating to AIDS transmission); *New Charges Possible in AIDS Assault Case*, U.S. Med., June 1987, at 8 (Pfc. Jane Doe charged with having sex without informing her partner that she was HIV infected); Squires, *supra* note 1 (citing numerous cases of courts martial or criminal charges brought against HIV-infected individuals for sexual relationships or biting); *Soldier with AIDS Virus to be Imprisoned for Sexual Contacts*, N.Y. Times, Dec. 4, 1987, at B5, col. 1 (first conviction); *Medical Specialist Faces AIDS Related Court-Martial*, Am. Med. News, Oct. 16, 1987, at 12 (case against Sgt. Richard W. Sargeant, similar to Pfc. Morris); Weischaus, *AIDS Criminal Laws, Cases Rise*, NAT'L L.J., July 20, 1987, at 3, col. 1 (Minnesota prisoner convicted of assault with a deadly weapon for biting a guard. The conviction was upheld in *United States v. Moore*, 669 F. Supp. 289 (D. Minn. 1987)); Cummings, *Charges Filed Against Blood Donor in AIDS Case*, N.Y. Times, June 30, 1987, at A18, col. 1 (Joseph Markowski was charged with attempted murder for selling his blood to a private collection center; later the charges were dropped for lack of evidence. *Pristin, Charges of Attempted Murder Voided in Case of AIDS-Tainted Blood*, L.A. Times, Dec. 2, 1987 Part II (Metro), at 1, col. 1); *Deadly Weapon in AIDS Verdict is Inmate's Teeth*, N.Y. Times, June 25, 1987, at A18, col. 6; Boorstin, *supra* note 1 (citing 30 cases being filed); *HIV Positive Private Charged with Assault*, Am. Med. News, May 22/29, 1987, at 1 (case of Army Pfc. Adrian Morris, Jr., who faced a court-martial for sexual relationships while infected with HIV); Testimony of Major Paul A. Capofari, Office of the Judge Advocate General, Department of the Army, Pentagon, to Presidential Commission on the Human Immunodeficiency Virus Epidemic, Interstate Commerce Commission Bldg. Hearing Room B, April 6, 1988 (reporting several more cases of HIV infected soldiers facing courts-martial).

The only reported criminal case outside of the United States occurred in the case of Linwood B., an employee of a U.S. Military Base in Nuremberg, West Germany. The man is a private U.S. citizen who was convicted by a Bavarian Court for sexual intercourse, knowing he had HIV. See E. Drucker, *The Case of Linwood B.*, Preliminary Report to *Medicins du Monde*, Paris, France (Unpublished December 25, 1987) (on file at the Ohio State Law Journal); Schmemann, *Bavarian Court Convicts American in AIDS Case*, N.Y. Times, Nov. 17, 1987, at A5, col. 1.

of these cases have involved military personnel. The Department of Defense orders HIV-infected personnel to refrain from unprotected sex and to inform their partners of their condition. Violation of a "safe sex" order can result in charges ranging from disobeying a military order to assault with a dangerous weapon and attempted murder.¹¹⁶

Second, criminal charges have been brought in connection with biting, spitting, kicking, or splattering of blood by an HIV-infected person.¹¹⁷ In *United States v. Moore*¹¹⁸ a federal district court upheld the conviction of a prisoner for "assault with a deadly or dangerous weapon" for biting two federal corrections officers. The "weapon" was HIV. In *State v. Haines*,¹¹⁹ an Indiana Superior Court judge sentenced a person with AIDS-related complex to six years imprisonment after he was convicted by a jury on three counts of attempted murder of a police officer and emergency technicians for splattering his blood at them.¹²⁰

Finally, cases have been brought for knowingly donating or selling blood contaminated with HIV. The most celebrated of these cases was Joseph Markowski who was charged with attempted murder for selling his HIV-infected blood to a Los Angeles blood company.¹²¹ The charges were subsequently dropped for lack of evidence on intent to murder,¹²² but legislators have since developed an interest in specifically criminalizing such activity.¹²³

These cases point out the inadequacy of applying a general criminal law theory

116. The military distinguishes between married and unmarried personnel. The spouses of married personnel are officially informed of the serological status of their spouse. A married couple then is permitted to have unprotected sex. The military will not inform a nonmarried sexual partner. But it has implemented a regulation effective April 1, 1988, requiring a commander to discuss a written counseling statement with any soldier who has tested positive and has received medical counseling. The form says that the commander is "imposing the following restrictions: 'You will verbally advise all prospective sexual partners of your diagnosed condition prior to engaging in any sexual intercourse. You are also ordered to use condoms should you engage in sexual intercourse with a partner . . . [Failure] to adhere to your previous medical counseling or the counseling I have just given you will subject you to administrative separation and/or punishment under the Uniform Code of Military Justice as I see fit.'" See N.Y. Times, July 10, 1988, at A19, col. 1; See also Squires, *supra* note 1; Turner, *The Military Battles a New "Biological" Weapon: AIDS*, Nat'l L.J., May 11, 1987, at 6, col. 1. The first military conviction resulted from a guilty plea in a court-martial to adultery, sodomy, and disobeying an officer by Sergeant Richard W. Sargeant; Testimony of Major Paul A. Capofari, *supra* note 115; *Soldier with AIDS Virus to Be Imprisoned for Sexual Contacts*, N.Y. Times, *supra* note 115. A guilty plea for aggravated assault and absence from the post in a similar case resulted in two years imprisonment. *Army Sergeant Pleads Guilty of Infecting a G.I. with AIDS*, N.Y. Times, Dec. 17, 1987, at B25, col. 1.

117. See, e.g., Squires, *supra* note 1; Boorstin, *supra* note 1.

118. 669 F. Supp. 289 (D. Minn. 1987).

119. Cause No. S-5585 (Super. Ct., Tippecanoe County, Indiana 1987 Term).

120. *Id.* See Gostin, *AIDS and Safety*, Boston Globe, Feb. 22, 1988, at 19, col. 4 (Letter to the Editor); Gostin, *Emergency Workers and AIDS*, N.Y. Times, Feb. 14, 1988, § 6 (Magazine), at 10, col. 2 (Letter to the Editor).

121. Cummings, *supra* note 115. See Gostin, *Criminal Law Won't Stop AIDS*, L.A. Times, July 6, 1987, Part II, at 5, col. 3.

122. Pristin, *supra* note 115.

123. A Bill by Senator Jesse Helms, for example, would make it a crime to donate blood, semen, or organs by anyone who is HIV positive or is a member of a high risk group. S.1352, 100th Cong. 1st Sess., 133 CONG. REC. S7989-91 (1987). Up to 1.4 million people are estimated to be silently harboring the virus, and many more are in high risk groups. See *supra* note 3. The great majority of these individuals are of sexually active age. An unknown number of these individuals will either know, or reasonably should know, they are at risk for HIV. We can conservatively assume that there will be hundreds of thousands of incidents each year where these individuals will engage in sexual relations or needle sharing. Should all of these incidents be defined as unlawful and subject to societal retribution? What moral or public health differences are there between the so-called "recalcitrant" prostitute or drug abuser and the rest of the many thousands who will silently engage in the same kind of behavior?

to an infectious disease. In the overwhelming majority of cases the prosecutions were dropped or individuals were acquitted. In none of these cases was there evidence that HIV had actually been transmitted. The general criminal law has sought to punish risk taking, sometimes of a very low level.

Partly in frustration with the difficulty in obtaining convictions under the general criminal law, policy makers have sought other avenues to criminalize the risk of AIDS transmission such as creating public health or AIDS-specific offenses. Approximately half the states have public health laws which designate engaging in sexual intercourse while knowingly infected with a sexually transmitted disease as a public health offense.¹²⁴ These public health statutes were created to control the spread of syphilis and gonorrhea. Most of these statutes, however, do not apply to HIV because AIDS is not usually classified as a sexually transmitted disease.¹²⁵ In response to this perceived "gap" in the law, some state legislators are moving toward re-classifying AIDS as a sexually transmitted disease.¹²⁶

Several states have enacted AIDS-specific statutes.¹²⁷ These statutes are based on the model of older public health offenses, except that they apply solely to HIV transmission. These AIDS-specific statutes differ in scope, but all make it an offense for a person to knowingly engage in some type of behavior which poses a risk of transmission of HIV—sexual intercourse, needle sharing, donating blood, or, more broadly, attempting to transfer any "body fluid." The elegance of such statutes from the prosecutor's perspective is usually there is no need to prove any specific intent. The elements of the crime are usually straightforward: the person knew he was infected with HIV, engaged in well-defined, risky behavior, and failed to inform his partner of the risk.

The haste to criminalize the risk of AIDS transmission ignores the failure of previous attempts to control venereal disease,¹²⁸ as well as the considerable jurisprudential and public health problems that would arise. Below I enumerate those

124. Gostin, *supra* note 64, at 477; Sullivan & Field, *supra* note 1, at 170.

125. W. CURRAN, L. GOSTIN & M. CLARK, *supra* note 68. A few public health statutes are not solely applicable to venereal diseases but cover any act where the person knowingly transmits a communicable disease. See OKLA. STAT. ANN. tit. 21 § 1192 (West 1983); TEX. REV. CIV. STAT. ANN. art. 4419b-1 (Vernon Supp. 1987).

126. See, e.g., FLA. STAT. ANN. § 384.25(2) (West Supp. 1988).

127. See, e.g., FLA. STAT. ANN. §§ 384.24, .34(1) (West Supp. 1988) (criminal offense for person with HIV to knowingly have sexual intercourse with another person, unless he first informs that person); IDAHO CODE § 39-608 (Supp. 1988) (makes it a felony for any person to expose another with intent to infect or knowing he has HIV, including sexual or shared needle transmission as well as donative gifts); 1987 La. Sess. Law Serv., extraordinary session 663 H.B. no. 1728 (West) (criminalizes intentional, sexual transmission of HIV without partner's informed consent); 1988 Wash. Legis. Serv. 206 S.B. 6221 (West Supp.) (a person who with intent to inflict bodily harm or "causes to be taken" by another HIV or exposes or transmits HIV is guilty of assault). There are many other bills which have been proposed which would create AIDS-specific offenses. See also H. R. 345, 100th Cong. 1st Sess. (1987) (would make it a crime if a federal employee with HIV knowingly or recklessly attempts to transfer any of his body fluids).

128. Experience with these public health offenses shows that the laws are now very rarely enforced. When they have been enforced on a wide scale, there has been no perceptible impact on the rate of transmission of sexually transmitted diseases. See Brandt, *supra* note 11, at 239; Merritt, *supra* note 71. The most extensive use of coercive powers have often been against vulnerable and visible populations such as prostitutes. See, e.g., *HIV Tests Ordered for Prostitutes, Their Clients*, 31 Med. News 39 (Feb. 12, 1988). Indeed, some public health statutes now specifically target this population. FLA. STAT. ANN. § 796.08(4) (West Supp. 1988) (any person who commits prostitution knowing that she or he has a sexually transmitted disease is guilty of an offense); NEV. REV. STAT. ANN., 1987 Cum. Supp. (Michie, 1987) tit. 15, chap. 201, § 201.443 (any licensed prostitute who practices with knowledge of a positive HIV test result is guilty of a felony).

problems in relation to general criminal law theory and AIDS-specific criminal statutes.

A. General Criminal Law Theory

Acts which pose a risk of HIV transmission have resulted in criminal charges ranging from simple or aggravated assault to attempted homicide or homicide.¹²⁹ The objective of this section is to demonstrate the difficulty of proving that a crime has been committed under general criminal law theory; and, where it can be proved, to show that often it achieves no important public purpose.

Depending upon the charge, there are three possible mental states required to prove an offense. The HIV-infected person can be accused of an act of transmission which is intentional, knowing, or reckless.¹³⁰

1. Intentional or Knowing Transmission

A person acts purposefully if his conscious objective is to cause a harmful result such as death.¹³¹ The Model Penal Code uses a subjective standard for criminal attempts so that if the facts were as the person believes them to be, it is an offense.¹³² This is important in the AIDS context because a person could be convicted of attempted murder if his intent is to kill, regardless of whether or not the method used poses a real risk of viral transmission.¹³³ For example, if a person spits at an enemy intending to kill him by transmitting AIDS, he has in theory committed attempted murder.

If an HIV-infected person plans to kill out of a motive such as revenge or greed, and uses a means which has some reasonably significant chance of killing such as sexual contact or needle sharing, that person should bear full responsibility under the criminal law. Yet, it would be unfair and contrary to public policy to punish acts which a person falsely believes to be dangerous. This is tantamount to punishing evil beliefs, while the law should be concerned with punishing and preventing truly dangerous acts. The criminal law achieves no valid purpose by punishing the nondangerous.¹³⁴

129. It would be highly unlikely for a homicide or manslaughter charge to be relevant because the victim must already have died. There is a period of five years or longer from the time HIV is contracted to development of serious symptomology. See Fauci, *supra* note 108, at 621. In most cases the person accused would have pre-deceased the victim.

130. See MODEL PENAL CODE § 210.2(1) (1980) (defining murder as the killing of a human being purposely, knowingly, or recklessly "under circumstances manifesting extreme indifference to the value of human life."). For a perceptive discussion of the application of the Model Penal Code to HIV transmission, see Sullivan & Field, *supra* note 1, at 162-69.

131. MODEL PENAL CODE § 2.02(2)(a) (1980) (defining a purposeful act).

132. *Id.* at § 5.01(1)(a).

133. Impossibility or low likelihood is not a defense to an attempted murder charge. See, e.g., *Rex v. White* [1910] 2 K.B. 124 (C.A.) (low dose of poison insufficient to cause death resulted in conviction for attempted murder). The reason such cases are attempted murder is that, according to Justice Holmes, they address "an evil which threatens death, according to common apprehension." *Commonwealth v. Kennedy*, 170 Mass. 18, 22, 48 N.E. 770, 771 (1897). See also E. MEEHAN, *THE LAW OF CRIMINAL ATTEMPT—A TREATISE* 165-66 (1984). Compare such low dose poison cases with an HIV-infected person who enters into a long sexual relationship, intending to kill. While a single sexual encounter has a low chance of viral transmission, a longer relationship raises the probabilities considerably.

134. There is strong legal support for this conclusion in a number of jurisdictions which employ a "dangerousness test"—viz, acts which are "directly dangerous" to society, or any interest protected by the criminal law, should be an

Irrespective of the dangerousness of an act, intentionality is exceedingly difficult to prove. One commentator illustrates the rarity of such cases by observing that "[h]aving sex or sharing needles is a highly indirect *modus operandi* for the person whose purpose is to kill."¹³⁵

"Knowing" transmission of HIV is also difficult to prove. A person acts knowingly if he is aware or is "practically certain" that his conduct will cause harm or death.¹³⁶ In the AIDS context, the person must have tested positive for HIV and must know that the particular act would almost certainly transmit the virus. Knowledge of seropositivity, however, is difficult to prove because many individuals are tested anonymously at "alternative test sites," or decline to be tested at all. In the event that such knowledge can be proved, the prosecution must show further that the person understood the conduct was an almost certain method of viral transmission. But epidemiological studies have demonstrated very low probabilities of HIV transmission in a single incident. The press, moreover, has given contradictory messages about the communicability of HIV. Some reports, for example, have minimized the risk of heterosexual transmission,¹³⁷ while others have emphasized it.¹³⁸ Given these ambiguities, it is doubtful that the prosecution could show that the defendant "knew" his conduct would be infectious.

Charges of attempted murder have been brought in cases where it is barely conceivable that any "purposeful" or "knowing" state of mind could reasonably be established.¹³⁹ Such cases often reflect either a politically motivated eagerness to be seen to be combatting AIDS or a misunderstanding of how it is transmitted. Unfortunately, many juries will labor under the same misapprehensions or have the same kinds of prejudices against groups most vulnerable to HIV.¹⁴⁰

a. *Sexual Intercourse*

Numerous cases have been brought against HIV-infected persons for knowingly or intentionally seeking to harm his or her partner through sexual intercourse.¹⁴¹ People enter sexual relationships with many different intentions, passions, desires,

attempted offense. See Sayre, *Criminal Attempts*, 41 HARV. L. REV. 835, 845 (1928). This is also referred to as the "dangerous proximity" test. *Hyde v. United States*, 225 U.S. 347, 388 (1912). Justice Holmes explained the rationale by stating that public policy is at the "bottom of the matter; the considerations . . . being the nearness of the danger, the greatness of the harm, and the degree of apprehension felt." O. HOLMES, *THE COMMON LAW* 68 (1881).

135. Sullivan & Field, *supra* note 1, at 163.

136. MODEL PENAL CODE, § 2.02(2)(b)(ii) (1980). "Knowledge is established if a person is aware of a 'high probability' of a particular fact." *Id.* § 2.02(7).

137. Gould, *Reassuring News About AIDS: A Dr. Tells Why You May Not Be At Risk*, *Cosmopolitan Magazine*, Jan. 1988, at 146.

138. W. MASTERS, E. JOHNSON & R. KOLODNY, *CRISIS: HETEROSEXUAL BEHAVIOR IN THE AGE OF AIDS* (1988).

139. See *supra* notes 115-123, and *infra* notes 140, 147-151 and accompanying text.

140. In the *Haines* case, for example, the jury took barely two hours to convict the defendant of attempted murder on all three counts, despite the paucity of any evidence that he intended to kill a police officer and emergency technicians. Mr. Haines had never seen his victims before. They found him unconscious, face down in a pool of blood after a serious suicide attempt. When he was revived by the emergency workers, his first words were "let me die, I have AIDS." A superior court judge in Lafayette, Indiana substituted a conviction for battery in place of the jury's finding of attempted murder. Mr. Haines was sentenced to six years imprisonment. *State v. Haines*, No. S-5585 (Super. Ct., Tippecanoe County, Indiana 1987 Term). See also *supra* note 120 and *infra* notes 160-61 and accompanying text.

141. See *supra* note 115 and accompanying text.

and fears. Causing harm through sexuality is seldom consciously planned. Often the relationship involves love, affection, or passion, where neither partner wants to harm the other, but is willing to take risks. In order to establish beyond a reasonable doubt what the person knew or intended, it is often necessary to discuss what went on and what was said, in the privacy of a sexual encounter. That encounter may have taken place years ago, or it may be part of an ongoing relationship where much was discussed. Did the person know he harbored the virus? Did he inform his sexual partner? Did they engage in protected sexual intercourse? Did the partner assume the risk of HIV transmission in many other sexual encounters or IV drug experiences? Such issues as consent or assumption of risk may not be defenses to a charge of attempted homicide. But all these questions can be probative in establishing whether the person's intention was in fact to kill. A person whose purpose is homicide is unlikely to inform a consenting partner of the risk or to use barrier protection.

The criminal law is ill suited to deal with intimate sexual relationships. Transmission of a virus does not fit neatly into the model of a guilty offender and an innocent victim. Both parties engaged in a relationship can, and are advised to, take precautions to avoid exchange of body fluids. It is usually problematic to allocate blame to one of the partners. For example, many targets of criminal prosecutions are prostitutes,¹⁴² who often try to use barrier protection despite client objections. If a man seeks out and pays a prostitute, and refuses to use protection, is the woman the only culpable party? Yet, in most such cases, only the prostitute is charged with a serious criminal offense.¹⁴³

Sexual intercourse is a primary mode of transmission of HIV. A knowing decision by an HIV-infected person to endanger an unsuspecting partner is blameworthy. But balanced against this undoubted fact is the relatively low likelihood of HIV transmission in a single incident (estimated at 1/1,000 or 1/10,000 if a condom is used appropriately).¹⁴⁴

Serious criminal sanctions to prevent relatively low risks may not be worth the costs. Attempts to criminalize sexual behavior are notoriously problematic. Sexuality and prostitution are highly complex human and biological behaviors which are resistant to change. Sexual intercourse is an integral part of human gratification and reproduction. Prostitution is a profession which has resisted societal efforts to prohibit it for millennia.

The criminal law, moreover, does not simply require high-risk groups to change a single act for a specific period of time. They are required to alter their behavior over

142. See generally A. BRANDT, *supra* note 11.

143. In an analogous case at Fort Sam Houston in Texas, an Army serviceman tested positive for HIV and was ordered by his company commander to inform his sexual partners of the test results and to take precautions. According to the charges against him, he continued dating and having sexual relations with three people. He confessed to his commander that while he took precautions to protect his sexual partners, he never informed them of his HIV status. Squires, *supra* note 1.

144. See Boorstin, *supra* note 1; *supra* notes 22-25 and accompanying text. Compare the relatively low risk of sexual intercourse with the much more significant risk of an HIV-infected mother having a seropositive baby. Here the risk is approximately 50% or greater. Yet, the criminal law would not establish a penalty on the mother for conceiving and failing to abort.

a lifetime. We already know from other health-related behavior such as smoking and diet how difficult such alterations are.

High-risk groups, then, are required, under pain of law, to alter their social behavior, not necessarily for their own good, but for the welfare of others. This is tantamount to asking individuals to behave at the highest stages of moral development. Reaching a high level of moral development is a goal most of us will not attain,¹⁴⁵ and it may be particularly unrealistic to expect vulnerable groups such as drug users or prostitutes to do so. Society creates harsh legal penalties, disproportionately applied to vulnerable risk groups, for failure to attain such lofty behavioral ambitions. Consequently, the law appears unrealistic and inequitable.

The creation of sexual offenses invites intrusion into the private lives of persons, particularly if they are gay or drug users. It legitimizes the state's interests in the intimate relations of adults in their homes, hotels, social clubs, and places of entertainment. It also allows utilization of the numerous components of the criminal justice system—police surveillance, grand jury investigations, and search warrants. Enforcement of sexual offenses is controversial not only because of the intimate behaviors involved, but also because the persons who are most likely to be affected have a disfavored, sometimes minority, status. The potential for selective and discriminatory enforcement against certain individuals and groups, and overzealous intrusion into their lives, is substantial.

A strong campaign of education and counseling to encourage monogamous relationships, avoidance of prostitutes, and use of barrier protection is likely to accomplish the public health objective more effectively and equitably.

b. *Donation of Blood*

Approximately 2% of all cases of HIV are attributable to transfusions of contaminated blood.¹⁴⁶ This mode of transmission has particularly interested prosecutors¹⁴⁷ and federal¹⁴⁸ and state legislators¹⁴⁹ in the use of coercion, because it directly affects heterosexual men, women, and children. When the behavior of a disfavored group such as gays or IV drug users has the potential for seriously harming a favored group such as heterosexuals and children, calls for compulsion are likely to be louder.

145. See R. KEAGAN, *THE EVOLVING SELF* (1982); L. KOHLBERG, *THE PHILOSOPHY OF MORAL DEVELOPMENT* (1981); Kohlberg, *Moral Stages and Moralization: The Cognitive-Developmental Approach*, in *MORAL DEVELOPMENT AND BEHAVIOR: THEORY, RESEARCH AND SOCIAL ISSUES* (T. Lickona ed. 1976).

146. See CDC, *Weekly Surveillance Rep.*, June 6, 1988.

147. The most celebrated case is Joseph Edward Markowski. Mr. Markowski, who had AIDS, sold his blood to a Los Angeles blood company, Plasma Production Associates. His case was discovered when he approached a bank security guard, tried to grab his gun and yelled "kill me, kill me, I have AIDS." He told police he had donated his blood on 23 other occasions, but this was never confirmed. He was charged with attempted murder. His case was later dropped for lack of evidence on intent, but not before receiving widespread publicity. See Gostin, *supra* note 121.

148. See S. 1352, 100th Cong., 1st Sess., 133 CONG. REC. S7989-91 (1987) (bill to make it a criminal offense to donate blood, semen, or organs by a person who knows he is HIV positive or in a high risk group).

149. See, e.g., IND. CODE § 16-8-7-6 (Supp. 1988) (knowing donation of blood is a felony); Ky. Reg. Sess. 1988 New Laws 557 HB 50 (persons in risk groups who donate or sell blood commit a class D felony); TENN. CODE ANN. § 68-32-104 (1987) (offense to knowingly donate HIV positive blood). California has considered a similar statute. Cummings, *supra* note 115.

The issue of criminalization for intentional donation of infected blood first emerged in the nationally publicized case of Joseph Markowski, who the prosecution claimed willingly received a small sum of money in return for a donation to a private blood collection agency.¹⁵⁰ Proving intent in cases of donation of blood is problematic. It is usually impossible, for example, in the case of a person who is destitute and gives blood for money, to prove a specific intent to cause death.¹⁵¹ The motive may well be to obtain a sum of money to buy food, drugs, or alcohol, rather than to harm others. Difficulties of proving that a person fully understood the consequences of his act and intended to kill some unknown blood recipients are potentially insurmountable. The circumstances lack a conceivable motive to kill.

The concern with blood donations as a mode of transmission of HIV are exaggerated. Since 1985 the U.S. blood supply has been screened for HIV antibodies using an Enzyme Linked Immunosorbent Assay (ELISA).¹⁵² The ELISA is very sensitive and is highly likely to detect contaminated blood.¹⁵³ From 1985 to 1987, only two cases of HIV-infected blood had escaped detection. During that time twenty-four million units of blood were screened.¹⁵⁴ The act of selling blood for which individuals are charged with attempted murder has a minuscule risk of causing harm.

If the real objective of such prosecutions were to protect the blood supply there would be many more effective ways to do so. In most of the known cases of intentional donations of contaminated blood, payments were involved. Indeed, some private blood collection agencies have shown a blatant disregard for public health. They often recruit donors in poor, minority areas where there are high incidences of IV drug use and sexually transmitted diseases. These areas have a disproportionately high seroprevalence of blood-borne diseases such as AIDS and hepatitis B.¹⁵⁵

Private blood collection agencies are largely unregulated and often do not actively seek to weed out individuals with infection by rigorous questioning and medical examination. Joseph Markowski, for example, had full-blown AIDS,¹⁵⁶ and was an IV drug user. Either of these conditions probably could have been discovered if the agency were taking reasonable care.¹⁵⁷

In effect, private blood collection agencies offer a monetary incentive to donate blood among the poorest members of the community; and because they are commercial entities interested in buying blood they may take less care in screening donors. Prohibition or direct regulation of private blood collection enterprises would

150. See *supra* note 147.

151. Mr. Markowski was reported to say, "I was so hard up for money that I didn't give a damn." Gostin, *supra* note 121.

152. See Gostin, Curran & Clark, *supra* note 12, at 13-17.

153. *Id.* at 11-13.

154. See Cummings, *supra* note 115 (quoting Terry Gautier of the American Red Cross).

155. The prevalence of HIV in large, usually poor, urban areas like the Bronx, Newark, or Miami is disproportionately high. See *A Review of Current Knowledge*, *supra* note 3, at 10-11.

156. See *supra* note 121.

157. IV drug use can be readily detected from examination of the person's arm. Manifestations of symptomatic carriers of HIV can be detected from examination of swollen glands, rashes, or an emaciated state.

be more beneficial to the public health than imposing harsh criminal penalties on HIV-infected donors.¹⁵⁸

c. *Spitting, Biting, and Splattering of Blood*

Spitting, biting, or splattering blood at a person in anger can be a serious assault. But prosecutors across the country are viewing the same behavior among persons with HIV as attempted murder or assault with a deadly weapon.¹⁵⁹ By viewing assaultive behavior as much more serious when exhibited by AIDS patients, prosecutors make two fundamental errors in judgment: they wrongly assume that persons with HIV have a desire to kill when they behave irresponsibly, and they significantly overestimate the danger presented by the behavior.

Many of the cases reported to date involve HIV-infected persons biting, spitting, or splattering blood during the course of a medical emergency such as following a suicide attempt.¹⁶⁰ Their intent to murder is supposedly established by words such as "I want you to know what it is like to die of AIDS."¹⁶¹ Such outbursts are not uncommon for persons in emergency rooms, hospitals, or closed institutions such as prisons. The person's behavior can just as easily be attributed to human despair and frustration, as to the desire to kill. In most cases the police officer, emergency physician, or medical technician is not even known to the defendant. Those who truly plan to kill, moreover, do not use the highly indirect means of spitting, biting, or splattering their blood.

It must also be remembered that in these cases the defendant has a terminal illness. The hopelessness of the person's condition and the anger involved in contracting a lethal virus relatively early in life can result in irrational behavior. Equally important is the fact that HIV has profound neurological effects which can develop before immunological deterioration can be detected.¹⁶² However, the extent

158. In many European countries, private blood collection agencies are banned. Another way to help protect the blood supply would be to develop a verifiable deferral list. Once a person donates positive blood, he would be informed that he was being placed on a list circulated to all blood collection centers.

159. See *supra* notes 115-16, 127.

160. The most illuminating case is *State v. Haines*, cause No. S-5585 (Super. Ct., Tippecanoe County, Indiana 1987 Term). On August 6, 1987, Joseph Haines, having discovered he had an advanced case of AIDS-related complex, tried to kill himself in his apartment. Police Officer John Dennes entered the apartment and found Haines unconscious, lying face down in a pool of blood. Two emergency medical technicians arrived, Rodney Jewell and Daniel Garvey. They were applying pressure to his severely cut wrists when Haines jerked away screaming, "let me die, I have AIDS." He then got up off the floor, advanced toward them, shouting that he wanted them to know what it was like to have AIDS. He thrust his arms forward, spraying his blood toward them. None of the emergency personnel has tested positive for HIV. On January 14, 1988, Haines was convicted on three counts of attempted murder. Circuit Court Judge Vincent F. Grogg set aside the jury's verdict because Haines' assault "could not constitute a substantial step toward killing." Grogg found Haines guilty of simple assault and sentenced Haines to three consecutive two year prison terms. See, Gostin, *When AIDS is a Weapon*, L.A. Daily Journal, March 3, 1988, at 4, col. 3; Gostin, *AIDS and Safety*, *supra* note 120.

161. See *State v. Haines*, *supra* note 160. But note the equally important first words in the Haines case, "Let me die, I have AIDS." Similar expressions of a wish to die are found in other cases. See *supra* note 147; Squires, *supra* note 115.

162. Levy & Bredezen, *Central Nervous System Dysfunction in Acquired Immunodeficiency Syndrome*, 1 J. ACQUIRED IMMUNE DEFICIENCY SYNDROME 41 (nearly 40% of AIDS patients develop neurological complications, and about 10% experience neurological symptoms as the initial manifestations of AIDS). See generally Fauci, *supra* note 108, at 621 (neurologic abnormalities occur in at least 60% of AIDS patients); Ginzberg & Gostin, *Legal and Ethical Issues Associated with HTLV-III Diseases*, 16 PSYCHIATRIC ANNALS 180, 182 (1986); Ho, Rota, Schooley, Kaplan, Allan, Groopman, Resnicke, Felsenstein, Andrews & Hirsch, *Isolation of HTLV-III from Cerebrospinal Fluid and Neural*

to which intentional or aggressive behavior can be associated with the neurological defects caused by HIV is not fully understood.

Theoretically, a person could be convicted of attempted murder under the Model Penal Code if the prosecution successfully proves that he believed his behavior could kill, and that he intended that result.¹⁶³ Although the risk of HIV transmission from spitting, biting, or splattering of blood is exceedingly remote,¹⁶⁴ the law will treat it as a seriously dangerous act. Of course prosecutors are concerned with evil intentions of aggressors and the apprehension of victims. But where the behavior is truly not dangerous, application of the criminal law appears unjust and unnecessary.¹⁶⁵ It is unjust because a person should not face serious punishment for a belief which will cause no harm.¹⁶⁶ Individuals should not be imprisoned for misguided beliefs, but for seriously dangerous acts. It is unnecessary because the acts which society seeks to prevent are futile and pose no significant risks to the community. The principal purpose of the criminal law when applied to a disease epidemic is prevention. Because this spontaneous, highly emotional behavior is fundamentally irrational, it is unlikely to be deterred by the criminal law. But even if the criminal law could prevent such minor assaultive behavior it would have no impact on the epidemic, because HIV will almost never be transmitted by such behavior.

While transmission of HIV through saliva has never been reported,¹⁶⁷ there have been two cases of transmission of HIV to health care workers who were soaked with contaminated blood.¹⁶⁸ It is, therefore, a valid goal for public health authorities to seek to minimize the risk of exposure to contaminated blood. There are more effective and less restrictive ways to accomplish this objective besides the use of the criminal law.

The most efficient method of preventing exposure to HIV-infected blood is for police, corrections officers, firefighters, emergency medical workers, and others to use rigorous precautions. The Centers for Disease Control (CDC) have issued detailed guidelines on prevention of HIV transmission in various settings such as the workplace,¹⁶⁹ schools,¹⁷⁰ and health care facilities.¹⁷¹ CDC guidelines for health care workers include all persons whose activities involve contact with patients or with blood or other body fluids. The CDC recommends universal precautions whenever a

Tissues of Patients with Neurologic Syndromes Related to Acquired Immunodeficiency Syndrome, 313 NEW ENG. J. MED. 1538 (1985).

163. See *supra* notes 129–136 and accompanying text.

164. See *supra* notes 36–40 and accompanying text.

165. Cf. *supra* note 133.

166. Should a person be prosecuted for a criminal attempt because of a harmless belief? "Even though a 'voodoo doctor' just arrived here from Haiti actually believed that his malediction would surely bring death . . . I cannot conceive of an American Court upholding a conviction . . ." *Commonwealth v. Johnson*, 312 Pa. 140, 152–53, 167 A. 344, 348 (1933) (Maxey, J., dissenting). If the means used are so ineffective, a conviction is often thought inappropriate. See *A.G. v. Sillem*, 133 Rev. Rep. 731 (Ex. Ch. 1863). See also E. MEEHAN, *supra* note 133, at 172–74.

167. See *supra* notes 35–54 and accompanying text.

168. See *supra* note 61 and accompanying text.

169. *Recommendations for Preventing Transmission of Infection with Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus in the Workplace*, 34 MORBIDITY & MORTALITY WEEKLY REP. 681 (1986).

170. *Education and Foster Care of Children Infected with Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus in the Workplace*, 34 MORBIDITY & MORTALITY WEEKLY REP. 517 (1985).

171. *Recommendations*, 1987, 36 (Supp.), *supra* note 52, at 2S.

person is likely to have contact with blood or body fluids, whether or not the fluid is known to be contaminated with HIV. It also urges particular care in emergency settings "in which the risk of blood exposure is increased and the infection status of the patient is usually unknown."¹⁷²

The Departments of Labor and Health and Human Services are developing a far reaching plan to prevent the transmission of blood-borne diseases. First, these Departments issued a Joint Advisory Notice on occupational exposure to HIV and hepatitis B virus (HBV).¹⁷³ The Notice is applicable to any worker who has a "predictable job-related requirement" that may involve exposure to blood or body fluids, such as health care workers, law enforcement officers, firefighters, and other "first response" emergency workers.¹⁷⁴ Second, the Occupational Safety and Health Administration (OSHA) has announced a targeted inspection program to examine actual workplace compliance with the guidelines.¹⁷⁵ Third, OSHA has given advanced notice of proposed rulemaking in order to protect workers from the risk of blood-borne diseases.¹⁷⁶ OSHA purports to act under the "general duty clause" of the Act, and the existing requirement for personal protective equipment whenever necessary to control environmental or other workplace hazards.¹⁷⁷

OSHA requirements include the development of special operating procedures that must be followed in all cases of expected exposure to body fluids. Each worker must receive education and training on special procedures to be followed and the use of protective clothing, including gloves, overalls, and eye and face protection.

Many police stations, prisons, and emergency departments across the country have not implemented OSHA requirements.¹⁷⁸ In the *Haines* case, police and emergency personnel responded to a suicide call, knowing the patient was HIV positive, without any protective clothing or equipment.¹⁷⁹ They applied pressure to a severely bleeding artery without any covering for their hands or face. Compliance with CDC guidelines and OSHA requirements would be more effective in preventing the transmission of blood-borne diseases than prosecutions under the criminal law.

An alternative to a charge of attempted murder is aggravated assault. In *United States v. Moore*¹⁸⁰ a federal district court upheld a conviction of assault with a "deadly" or "dangerous" weapon in connection with the biting of two federal correctional officers. The court decided there was sufficient evidence to sustain the

172. *Id.* at 5S.

173. Dep't of Labor and Dep't of Health & Human Services, Joint Advisory Notice, Protection Against Occupational Exposure to Hepatitis B and Human Immunodeficiency Virus, (Oct. 19, 1987).

174. *Id.* at 5.

175. 52 Fed. Reg. 41818 (1987) (proposed Oct. 30, 1987).

176. Occupational Exposure to Hepatitis B Virus and Human Immunodeficiency Virus, 52 Fed. Reg. 45438 (1987) (codified at 29 C.F.R. 1910) (proposed Nov. 27, 1987).

177. Occupational Safety and Health Act 1970, § 654(a)(1), 29 U.S.C. § 654 (1982) (requires each employer to furnish a place of employment which is "free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.").

178. See, e.g., Judis, *An AIDS Nightmare*, N.Y. Times, Jan. 17, 1988, 6 (Magazine), at 32 (police and emergency workers soaked in blood when handling a brutal murder).

179. See *supra* note 140. The rescue workers covered the wound with their bare hands.

180. 669 F. Supp. 289 (D. Minn. 1987).

conviction because the defendant tested positive for HIV, HIV could be transmitted through bodily fluids, and blood was sometimes present in the mouth.

The reasoning in *Moore* is flawed. A dangerous or deadly weapon is an object that is "used in a manner likely to endanger life or [cause] serious bodily harm."¹⁸¹ Scientific evidence clearly shows the absence of any "likelihood" that a human bite would endanger life or cause serious physical harm through transmission of HIV. Systematic epidemiologic investigations of persons exposed to small amounts of HIV infected saliva or blood demonstrate that there have been no documented cases of transmission from biting; that saliva may block transmissibility; and that even sustained exposures do not result in serological conversion.¹⁸² The federal district court, then, accepted evidence of a theoretical possibility of serious harm as sufficient to prove a likelihood. The Supreme Court, in a related context, has stressed the importance of basing legal decisions on scientific probabilities rather than remote, unforeseeable risks.¹⁸³

In a charge of assault with a dangerous weapon, the weapon is a potentially lethal microbe. Because that microbe can potentially be isolated in most, if not all, bodily fluids, prosecutors wrongly assume that a person's saliva, blood, and mucous are deadly. It follows that what would ordinarily be regarded as minor assaultive behavior such as spitting, biting, kicking, or splattering blood becomes a felony if the person harbors the human immunodeficiency virus. The mischief of this approach is that the same behavior which many people exhibit in anger, frustration, or despair becomes a potentially serious crime because of the person's health status. Such minor assaultive behavior can be witnessed almost daily in hospital emergency rooms, closed and overcrowded institutions such as prisons or hospitals for the mentally ill or retarded, and on sports fields when a player is angry with another player or the umpire.

A human bite is clearly a battery and the law can and should prevent such crimes. But to raise this behavior to a very serious offense because of the person's health status is misguided. I suggest that the reason for the new spate of charges of aggravated assault in relation to HIV has more to do with misbelief and prejudice than any clearly thought out position on culpability or degree of danger involved. The same minor assaultive behavior of persons with other blood-borne diseases such as hepatitis B (HBV) occurs with equal regularity. Transmission of HBV is much more efficient and is likely to result in higher overall morbidity and mortality from a bite or splattering of blood;¹⁸⁴ yet, no prosecutions for deadly assault have been reported against HBV carriers.

The reason for the differences in society's treatment of these two comparable

181. *United States v. Hollow*, 747 F.2d 481, 482 (8th Cir. 1984).

182. See *supra* notes 35-54 and accompanying text.

183. *School Bd. of Nassau County v. Arline*, 480 U.S. 273, 288 (1987) *reh'g denied*, 107 S.Ct. 1913 (1987). See *supra* note 13 and accompanying text.

184. See, e.g., Lettau, Smith, Williams, Lundquist, Cruz, Sikes & Hadler, *Transmission of Hepatitis B with Resultant Restriction of Surgical Practice*, 255 J. A.M.A. 934 (1986) (Five patients contracted HBV after surgery, directly attributable to surgeon. Surgeon still permitted to practice using infection control until a further case of HBV transmission was discovered.).

diseases is that AIDS has developed a special mystique. Public apprehension of transmissibility from aggressive behavior is out of proportion to the real risks involved.

2. Reckless or Negligent Transmission

One of the principal difficulties with criminalization of intentional or knowing transmission of HIV is that the requisite mental states often cannot be proved. Criminal charges can also be brought against an individual for recklessness, or even negligence, in connection with HIV transmission. The problem here is not so much inadequate proof, but that too many people would be swept into the criminal justice system.

A person acts recklessly under the Model Penal Code when he "consciously disregards a substantial and unjustifiable risk"¹⁸⁵ and a person acts negligently when he "should be aware of a substantial and unjustifiable risk."¹⁸⁶ Disregarding that risk for a reckless or negligent act must involve "a gross deviation from the standard of conduct that a law-abiding"¹⁸⁷ or "reasonable"¹⁸⁸ person would observe in a similar situation.

Crimes involving recklessness or negligence cast a very wide net. They could include not only persons who test positive for HIV, but also people in high risk groups. The criminal law could, therefore, impact on a very large population engaging in sexual activity.¹⁸⁹

The great majority of the population is aware that AIDS is a sexually transmitted disease and that it is lethal.¹⁹⁰ If a person knows he is seropositive and, nonetheless, engages in sexual intercourse, he is consciously disregarding a known risk, which can be considered reckless behavior. At the very least he should be aware of that risk, which can be negligent behavior.

Opinion polls also show that most of the population knows that gays and IV drug users are at high risk for AIDS.¹⁹¹ It is conceivable that the criminal law would hold gays and IV drug users accountable not only for what they know, but also for what they reasonably should know. If a person has engaged in high risk behavior and failed to be tested,¹⁹² the courts could put him in the same position as if he knew he were seropositive. Any other rule of law would provide an incentive to avoid being tested or counseled.

Thus, if a person tests positive for HIV or knows he is in a high-risk group, and

185. MODEL PENAL CODE § 2.02(2)(c).

186. *Id.* § 2.02(2)(d).

187. *Id.* § 2.02(2)(c).

188. *Id.* § 2.02(2)(d).

189. See generally Sullivan & Field, *supra* note 1, at 164.

190. Polls consistently show that 98-99% of the public know about AIDS, and up to 93-95% know it is sexually transmitted. Singer, Rogers & Corcoran, *The Polls—A Report, AIDS* 51 PUB. OPINION Q. 580, 584, 588 (1987).

191. *Id.* at 586.

192. The Centers for Disease Control strongly advises persons in high risk groups to be tested. *Additional Recommendations to Reduce Sexual and Drug Abuse-Related Transmission of Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus*, 35 MORBIDITY & MORTALITY WEEKLY REP. 152 (1986) [hereinafter *Additional Recommendations*].

has sexual intercourse, he is potentially committing a criminal offense under a recklessness or negligence standard. The question will arise whether sexual intercourse by a person who knew, or reasonably should have known, he was HIV positive is always reckless or negligent. Put in terms expressed by the Model Penal Code, is sexual intercourse by a person at risk always a "gross deviation" from the standard of conduct a law abiding or reasonable person would observe?¹⁹³ Public health options for persons at risk for HIV are not limited to abstinence. Health education efforts acknowledge that it may be reasonable for a person at risk to have sex, provided he discloses the risk to his partner and engages in "safer sex" practices.¹⁹⁴ A strong argument could be made that no crime is committed if public health advice is followed, because the person has not grossly deviated from acceptable societal standards.

There are two major problems with using a recklessness or negligence test for criminalizing HIV transmission. First, there are potentially millions of people who come within recognized risk groups who could be susceptible to criminal charges.¹⁹⁵ There is no clear advance notice given to these individuals as to what behavior will be treated as an offense; the prospect exists that any sexual or needle sharing behavior of persons in these groups would be viewed as a criminal act, at least by some prosecutors and juries. The potential for widespread use of the criminal law would chill cooperation with public health programs, and legitimize prejudice and moral disapproval of already disfavored populations.

Second, an approach based upon recklessness or negligence would fail to target only those who engage in truly blameworthy behavior. For example, a person engaging in a long-term, loving relationship could "recklessly" or "negligently" transmit HIV to his partner, even though he had no intention whatsoever of causing him harm. Using a vague and far-reaching standard of recklessness or negligence could punish individuals who have no evil or antisocial intentions.

B. *Public Health or AIDS-Specific Offenses*

The substantial difficulties involved in prosecuting AIDS cases under the traditional criminal law have led state legislators to consider specific public health offenses. Criminal offenses are commonly found in old infectious disease and venereal disease statutes. Some statutes create an offense for transmission of any communicable disease, while others are limited only to specified sexually transmitted diseases. Many venereal disease statutes do not apply to HIV because of the way AIDS is classified.¹⁹⁶

193. MODEL PENAL CODE § 2.02(2)(c), (d).

194. See *Additional Recommendations*, *supra* note 192.

195. The CDC lists a wide range of groups that are at high risk for HIV including homosexual and bisexual men, past and present IV drug users, persons with signs or symptoms of AIDS or ARC, persons born in Haiti and countries in Central America where heterosexual transmission has occurred, male and female prostitutes, sex partners of infected persons, hemophiliacs who have received blood-clotting products, and children of infected mothers. W. CURRAN, L. GOSTIN & M. CLARK, *supra* note 68, at 224–25. Are all of these individuals obliged in law to be tested? If they are not tested and have sexual intercourse, is that sufficient to establish recklessness or negligence?

196. See *supra* notes 68–71 and accompanying text.

One commentator has criticized the old public health laws as ineffective, unusable, and punitive (targeting "easy" populations such as prostitutes).¹⁹⁷ Such statutes have rarely been used. Undaunted by this historical perspective, state legislators are reclassifying HIV to include the virus within existing public health law offenses or are enacting new AIDS-specific statutes. The new statutes follow the same model as old public health law offenses, but many authorize more restrictive sentencing. While the old statutes tended to have a mild "public health" sanction,¹⁹⁸ levying a fine or a very short prison sentence, modern AIDS-specific offenses make HIV transmission a felony.¹⁹⁹

The numerous problems of prosecuting under the traditional criminal law have been reviewed.²⁰⁰ Is it possible to prove that a person intended to kill a partner through the indirect method of sexual intercourse or sharing a needle? How real a possibility of transmission must exist before a prosecution can be successful? Does it matter if the virus is not actually transmitted and the "victim" is left unharmed? Is the fact that the person disclosed his HIV status and/or used a condom relevant? Can a person's mouth or teeth be regarded as a "deadly" weapon? What behavior is "reckless" or "negligent?" Should all high risk groups be included whether or not they actually test positive for HIV? Many, if not all, of these "nice" jurisprudential questions can be avoided by using statutes which clearly define the behavior they seek to punish. By creating a specific statute, legislators make it easier to convict in cases in which the individual is engaging in truly dangerous behavior and also give clearer notice to persons about the behavioral norms to which society expects them to conform.

In formulating a specific public health statute, legislators should inquire what behavior may reasonably be proscribed as criminal by society. Such a statute would not be concerned with particular levels of mental intent and culpability.²⁰¹ Rather, it would narrowly target those behaviors which were truly dangerous and which the criminal law might reasonably be expected to deter. Accordingly, the statute would be concerned only with the two primary modes of HIV transmission—sexual intercourse and the sharing of contaminated needles. It would not ban all sex and drug use of HIV-infected people. Such a course would be unrealistic and unfair. It would be unrealistic to expect individuals to forego all sexual contacts and use of drugs for their entire lives. Society has never had success in enforcing similar outright bans in the past.²⁰²

Banning all sex and drug use would also be unfair because sexuality is necessary

197. See *supra* note 11 and accompanying text.

198. See Curran, Gostin & Clark, *supra* note 12.

199. See, e.g., IDAHO CODE § 39-608 (Supp. 1988) (any person exposing another intentionally or knowingly commits a felony punishable by up to 15 years in prison, a fine of up to \$5000 or both).

200. See *supra* notes 131–195 and accompanying text.

201. It has been proposed that AIDS-specific statutes should follow a classic culpability approach. Robinson, *AIDS and the Criminal Law: Traditional Approaches and a New Statutory Proposal*, 14 HOFSTRA L. REV. 91 (1985). But such a statute would retain virtually all of the problems with a traditional criminal law approach. See Sullivan & Field, *supra* note 1, at 178–82.

202. See *supra* notes 141–45 and accompanying text; Fineberg, *Education to Prevent AIDS: Prospects and Obstacles*, 239 SCIENCE 592, 596 (1988).

for human contentment and gratification and because persons who use drugs are often physically dependent on them.²⁰³ Further, such a ban would not be narrowly tailored to combat the harm intended under the statute. Sharing a needle after it has been sterilized with bleach and having sexual intercourse using barrier protection are not highly dangerous acts, although they do pose a lower level risk.

Finally, where a partner is informed of the person's HIV status and consents, there should be no criminal penalty for sexual intercourse or needle sharing. Criminal statutes should not unnecessarily restrict sexual freedoms and should criminalize only culpable acts. Society may well believe that interference with an intimate relationship where both partners give a fully informed consent is unnecessary and unjust.

A specific public health statute, therefore, would seek to change behavior of people who were infected with HIV by requiring them to give certain information and take certain precautions before engaging in well-defined dangerous behavior. A statute, following this conception, would make it a criminal offense only if *all* of the following elements were present: 1) the person knows he is HIV positive and has been apprised by a health care professional or public health official not to engage in unsafe sexual or needle sharing behavior; 2) the person does not notify his partner of his HIV status or does not use barrier protection against exchange of body fluids; and 3) the person engages in sexual intercourse or needle sharing. To establish the offense, it would not be necessary to prove either an intent to harm or that HIV was actually transmitted.

The proposed test is the most acceptable formulation of a criminal standard for HIV transmission: it is based upon objective fact and not moral judgment, it is narrowly targeted to the most dangerous modes of transmission, and it allows vulnerable risk group members to engage in their private lives without state interference provided they obtain an informed consent from their partner or use barrier protection.

Several recent public health acts authorize substantial prison sentences for breach of the statute.²⁰⁴ Such draconian measures are wholly inconsistent with the goal of a public health statute. Since those statutes appear in public health, not penal codes, their rationale should be different. The objective should not be retribution and sentences should not appear punitive.²⁰⁵ Mild public health sanctions such as fines, supervision, or attendance orders or, as a last resort, short prison sentences are more appropriate to the public health objective. The reasons are threefold. First, the state's purpose is to set a behavioral boundary to prevent transmission of disease, not to be overly concerned with culpability and moral judgment. The public health statute says nothing about whether the person deserves punishment because of his evil intentions. Where such evil intentions can be proven, and a retributive sentence is justified, the state should be required to bring a traditional criminal law prosecution such as attempted murder. Retribution is only justified if the sufficient criminal intent can be proven.

203. See *supra* notes 141–145 and accompanying text.

204. See *supra* notes 140, 199 and accompanying text.

205. See *infra* notes 207–209 and accompanying text.

Second, there is no evidence that the imposition of a stiff criminal penalty will be more effective in preventing dangerous behavior. Most defendants will be terminally ill themselves, and are unlikely to be deterred by a potential felony, as opposed to a misdemeanor, conviction. Nor would there be much public support for harsh sentences of terminally ill individuals.

Finally, the state ought to tread carefully in applying harsh criminal sentences in the deeply private sphere of sexuality or in the underground world of shooting galleries. These are activities which do not respond well to a punitive approach because they are, in part, biologically driven or habitual.²⁰⁶

There is a growing consensus among public health authorities that if coercion is to be used at all in the AIDS epidemic, a narrowly focused, nonpunitive approach such as the one proposed would be preferable.²⁰⁷ To be sure, such a statute would not address the core problems of the spread of HIV, but the inability or unwillingness of authorities to deal with such hard cases may undermine confidence in those who are entrusted with the protection of public health.²⁰⁸

The best case for criminalization of HIV, then, would be a specific public health statute. But it may well be a mistake to venture into any criminal law solution to a disease epidemic. The fundamental error of a specific criminal statute lies in the fact that it specifically addresses a subject (sexuality) which is deeply private and sensitive, and targets unpopular populations (prostitutes, gays, and IV drug users). By doing so, society risks significant abuse of the organs of law enforcement and criminal justice. A statute addressing sexually transmitted disease legitimizes police interest in intimate sexual activities: how partners are chosen, what was said, what precautions were taken. Such a statute also provides an outlet for society's moral distaste for prostitution, drug abuse, and homosexuality. Entrusting police, prosecutors, and juries to detect, enforce, and adjudicate these laws invites unwarranted intrusions into privacy, and victimization of unpopular groups.

An AIDS-specific statute also has the effect of separating HIV from the mainstream of communicable disease control. HIV is a virus which has many unique features. But public health measures designed to impede the spread of HIV should not be fundamentally different from those aimed at other viral infections.²⁰⁹ Risking transmission of HIV is no more dangerous than risking transmission of many other serious communicable diseases. By enacting laws which apply only to AIDS, legislators will further stigmatize carriers and raise apprehension among the public.

The central question of whether the criminal law, in any form, should be applicable to HIV transmission is whether any legitimate societal goal would be served.

206. See *supra* notes 141-145 and accompanying text.

207. See PRESIDENTIAL COMM'N REP., *supra* note 114; A.M.A. Council, *supra* note 114.

208. UPDATE 1988, *supra* note 3, at 83.

209. See Gostin, *The Future of Public Health Law*, 12 AM. J. LAW & MED. 461 (1986).

C. *Goals of the Criminal Law*

The overarching policy question in determining whether the criminal law is an appropriate model to apply to the AIDS epidemic is whether it serves some important public purpose. Each of the usual rationales for the criminal law—retribution, incapacitation, and deterrence—appear ill-suited to deal with a disease epidemic.

There is an understandable outrage when any citizen acts maliciously to place another's life in jeopardy. But apart from those rare cases where a person consciously decides to use the virus to kill, there would be little public support for retribution for transmission of a virus. Persons who transmit HIV are also infected themselves and will probably die from AIDS. Thus, if punishment were to be sought, it would be directed against a terminally ill patient. Sometimes, if a person has only a short time to live, it can even provide a justification for discontinuing a prosecution.²¹⁰ Further, in the overwhelming majority of cases, it is very difficult to establish that the accused had evil intentions deserving punishment. It is more often the case that the person took unreasonable risks motivated by sexual passions, physical dependence on drugs, or both. The application of a retributive criminal law model to a disease epidemic would likely be strongly opposed by public health authorities and distrusted by persons most vulnerable to infection.

Even those responsible for prosecuting cases of HIV transmission reject retribution as a rationale.²¹¹ Instead, they argue for incapacitation. Incapacitation can be defined as the right or duty of society to incarcerate a dangerous individual to prevent him from doing harm, at least while he is deprived of liberty. It is certainly understandable to seek to isolate an individual engaging in dangerous behavior. But the danger is caused by a retrovirus that will remain in his body potentially for life. Any incapacitation during the period of "danger," therefore, can be lifelong. This potential life sentence is unjust when directed against an individual for public health "crimes" such as having sex or sharing needles. More importantly, because the person continues to be infectious once he is imprisoned, he is not incapacitated at all. The decision to incarcerate only shifts the risk to a new, probably more vulnerable, population. The problem of homosexuality, rape, and drug use in prisons may make it more, not less, likely that the virus will be transmitted.

Probably the most important goal of the criminal law in the context of a disease epidemic is deterrence. The best that can be hoped for is that the threat of criminal sanctions will prevent people from taking unreasonable risks that could transmit the virus. The criminal law is not a likely vehicle for deterring such behavior. In most cases where the criminal law has been used against AIDS carriers there was no motive or advanced planning. Spontaneous behavior driven by human anguish, despair, or passion is difficult to prevent. Further, persons infected with HIV are dying, and a long prison sentence is unlikely to be a deterrent. It is hard to envisage that a person who only has months or years to live would fundamentally alter enjoyable behavior

210. See *New York v. Camargo*, 135 Misc. 2d 987, 516 N.Y.S.2d 1004 (N.Y. Sup. Ct. 1986) (N.Y. criminal court ruled that in the interests of justice it was discontinuing the prosecution of a defendant charged with the sale of cocaine because he was bedridden with AIDS and had only months to live).

211. See *Squires*, *supra* note 1.

because of the threat of a criminal prosecution. The person might be just as likely to continue the risky practices, but be certain not to confide in his physician, counselor, or sex partner. Use of the criminal law in cases of AIDS transmission, then, is unlikely to serve a valid public purpose.

V. SUMMARY

This Article has examined the charged issue of whether a person who risks AIDS transmission should be subject to coercive state action. This is not simply an academic question, for state legislators have already enacted laws which authorize isolation and criminal prosecution of "recalcitrant" AIDS carriers, and prosecutors have already filed criminal charges in numerous cases.

The reasons society has been attracted to coercive measures are understandable. A deliberate or reckless decision to endanger another person's life is deplorable. Public health officials have sometimes appeared uncaring or impotent in dealing with highly visible cases of persons who act in wilful disregard of the value of human life. The use of compulsion provides an outlet for the rage and frustration society has for these "hard" cases.

The use of coercive powers, far from accomplishing its mission of impeding the spread of the AIDS epidemic, could well fuel it. Coercive powers would not go to the core of the problem. The overwhelming majority of cases of HIV transmission are outside the reach of legal control mechanisms and will go unnoticed. Those who do come to the attention of the police and public health officials are likely to be the poorest, least articulate of those harboring the virus. Indeed, there is ample historical evidence to demonstrate that coercive powers have almost exclusively been used against unpopular targets such as prostitutes; and even when used against large numbers of subjects, compulsory powers have not altered the course of disease epidemics.²¹²

The reasons coercive powers are inappropriate to control the spread of disease are that they often fail to discriminate between unsubstantiated fears, or even loathing, of high-risk groups, and truly dangerous behavior; they are unlikely to deter highly ingrained human sexual or needle sharing behavior; and they cause a loss of trust and confidence by vulnerable populations who will not cooperate with essential public health programs of education, counseling, and treatment.

Most compulsory powers do not focus narrowly on significant health risks. They sweep in nondangerous behavior such as spitting, biting, or splattering of blood, along with more dangerous behavior such as sexual intercourse and needle sharing. Prevention of very low risk behaviors will not have any effect on the AIDS epidemic, even assuming that such spontaneous behavior could be prevented by the threat of coercive action.

Compulsory public health powers are unlikely to be efficacious in preventing even dangerous acts such as unprotected sexual intercourse and needle sharing. Both are highly resistant to change. Sexuality, including prostitution, is driven by a

212. See *supra* note 11 and accompanying text.

complicated set of biological, psychological, and social forces, and drug use is often physically addicting. Prostitution, drug use, and often sodomy are already unlawful, and it is doubtful whether new criminal offenses or isolation for HIV transmission would serve as a deterrent. The value of coercive laws as a deterrent is diminished further by the fact that AIDS is a terminal condition. Persons with catastrophic illnesses may be just as likely to continue their enjoyable activities quietly as they would be to give them up for fear of punishment.

Indeed, there is good reason to believe that widespread use of coercion against AIDS carriers would make it more difficult to combat the disease. The argument that coercion will drive the epidemic underground is well rehearsed. But it may be one thing to require a person to be tested, and quite another to deprive a person of his liberty for having sexual intercourse or sharing a needle—behaviors he, and others, have engaged in throughout adulthood. It will very much be in the interests of risk group members not to know if they have the virus and not to discuss their sexual or needle sharing contacts with counselors or physicians. The last thing that public health officials want is a population that is frightened of punitive solutions to their health problems.

The use of compulsion, then, is unlikely to be effective in impeding the spread of HIV, and may even exacerbate public health problems. Balanced against the marginal benefit of compulsion are the potential intrusions into the private lives of vulnerable populations. If persons at risk for HIV are prohibited from engaging in unprotected sex or drug use, then police and public health authorities have a corresponding duty to enforce these prohibitions. Isolation or criminal statutes open the door to surveillance of intimate relationships where there is an expectation of privacy.

The concern is not only that compulsory measures are directed at intensely private affairs. It is also that the primary targets of coercion are traditionally unpopular groups—gays, drug users, and prostitutes, disproportionately represented by racial minorities. Police, prosecutors, and juries may base their decisions, in part, on “vague, undifferentiated fears” or on “irrational prejudice.”²¹³ Worse, they may succumb to a “bare . . . desire to harm a politically unpopular group.”²¹⁴

Public policy aimed at isolating or criminalizing AIDS transmission may appear to be getting tough with the disease. But they divert our attention and resources from the policies that would make a real difference—focused education, testing, counseling, and treatment for drug dependency.

213. *City of Cleburne v. Cleburne Living Center*, 473 U.S. 432, 449 (1985).

214. *United States Dep't of Agriculture v. Moreno*, 413 U.S. 528, 534 (1973).